

iPod® + iTunes® for Windows® and Mac® in a Snap

Brian Tiemann

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BONUS CONTENT

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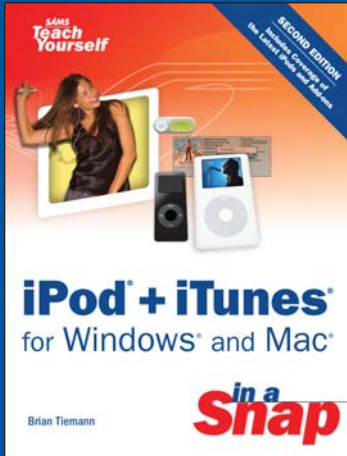
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BONUS CHAPTER

1

iPod Add-Ons

IN THIS CHAPTER:

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If there's any sure indication of the runaway success of the iPod, it's in the incredibly vast market that has emerged for third-party add-on gadgets you can buy to turn your iPod from a simple music player into anything from an alarm clock to a boom box, to double or triple its battery life, to play FM radio, to record and play back voice memos, and especially to bring your vast iTunes music collection with you in the car for your daily commute or a thousand-mile road trip. The iPod's versatile design, with the standardized Dock connector at the bottom carrying all kinds of signals to and from the unit, makes third-party enhancement a slam dunk.

Companies such as Griffin, Belkin, Bose, Monster, Sonnet, XtremeMac, JBL, and many others both well-known and obscure have jumped onto the iPod bandwagon to bring you the tools for making the iPod just what you need it to be. The tasks in this chapter describe some of the most popular methods for meeting the most common iPod-enhancement needs. Although some solutions are served by only a single unique company or product, others have a variety of possible products that compete for your business, and new products are entering the market all the time. Talk to a Mac or iPod sales professional or one of the folks at the Genius Bar at any Apple Store to make sure that you're getting the best product in the field you're interested in.

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▶ NOTE

The tasks in this chapter describe add-on accessories available for iPod 3G and later (iPods with a Dock connector). Many accessories available for the full-size iPod are also available in versions compatible with the iPod mini or iPod nano, and some work equally well with all these models. Earlier versions of iPods, without the Dock connector, have fewer options for accessorizing, and they are generally not addressed here. Also, most accessories are incompatible with the iPod shuffle.

▶ WEB RESOURCE

<http://www.apple.com/ipod/accessories.html>

Apple's iPod Accessories site features purchasing links for some of the most popular and highly recommended gadgets to add to your iPod.

<http://www.apple.com/ipod/nike>

The Nike+ iPod Sport Kit is a new product from Apple and Nike that connects your iPod nano with a pedometer sensor in your shoe and tracks your training progress with personalized feedback and workout tunes.

96 Listen to FM Radio**→ SEE ALSO**

- 97** Record Voice Memos
- 100** Listen to Your iPod in the Car

Unlike many competitor products, the iPod does not have a built-in FM radio tuner function. This omission has allowed Apple to concentrate the iPod's feature set on its primary purpose—playing back digital music and videos from your computer. Still, many have criticized Apple for failing to include what other companies consider to be a basic and required feature in a portable music player.

Apple's new Radio Remote is a solution to that problem. At \$50, it combines the functionality of an FM radio tuner and a wired remote controller, and it fits both the iPod 5G and the iPod nano, allowing those devices to retain their small sizes by keeping the radio circuitry outside the unit. Specialized software in both these iPod models support the Remote, if present, with a full-screen graphical tuner and functions for saving and browsing favorite stations. Furthermore, the Radio Remote allows customers to choose whether they want FM radio functionality or not, rather than having to pay for it even if they don't intend to use it. Apple's Radio Remote isn't the only device that can unlock the iPod's radio function.

▶ NOTE

Third-party devices such as the DLO nanoTune (\$69.99) provide not only the FM tuner necessary for using the iPod's radio functions, but also an FM transmitter for sending your iPod's music to your car stereo. See [100 Listen to Your iPod in the Car](#) for more information on car audio solutions.

1 Get the Apple Radio Remote

The Apple Radio Remote is available at the online Apple Store (<http://store.apple.com>) or any Apple retail store. It comes with a new pair of earbuds, so if yours are starting to show their age, replacing them is a good excuse to pick up the Radio Remote.

2 Connect the Remote to the iPod

The Radio Remote, like most iPod accessories, connects to the Dock connector at the bottom of the unit. The remote's fixed cable leads to a wide connector plug that resembles the cable you use to sync the iPod to your computer. Connect this plug to the iPod's Dock connector.

Connect your earbuds or headphones to the jack in the other end of the remote. You can clip the Radio Remote to your clothes so that you can control the radio tuner—as well as the regular iPod controls—while you jog or ride your bike.

3 Go to the Radio Screen

Wake up the iPod, if necessary, by pressing the **Menu** button. Keep pressing **Menu** until you reach the iPod's Main Menu. You'll notice that there's a new menu item: **Radio**. Highlight this option and press **Select**. The iPod's screen changes to a brushed-metal frame surrounding a large readout of the currently tuned radio station, with a status display below.

1 Get the Apple Radio Remote



2 Connect the Remote to the iPod

3 Go to the Radio Screen



5 Set a Favorite Station

4 Tune to a Station



6 Switch Between Radio Regions

▶ NOTES

The **Radio** menu option is available only when the Radio Remote is connected to the iPod. Disconnecting the Radio Remote returns you to the Main Menu, where the **Radio** option is no longer present.

Remember that radio reception requires some battery power, and the Radio Remote draws power from the iPod's battery above and beyond the power normally required to run the iPod. This means that the battery will run down more quickly than usual when you listen to FM radio.

4 Tune to a Station

When you're in the **Radio** screen, by default you're in a listening mode—similar to the **Now Playing** mode when you're listening to digital music—that lets you adjust the volume using the wheel and shows you artist and track information in the status display at the bottom using **RDS** data, if available.

▶ NOTE

A blue “transmitter” icon appears in the upper-left corner of the screen while the iPod is tuned to a radio station. This icon indicates the status of the Radio Remote even while you navigate to other features of the iPod.

▶ KEY TERM

Radio Data System (RDS)—A digital broadcast standard by which regular FM radio stations can transmit data such as station, artist, and track names for the currently playing music, which can then be displayed (word by word) on a radio that is equipped to receive and display such data. Many newer cars' audio systems, as well as the Apple Radio Remote, can receive RDS data.

To tune the iPod to a different station, press the **Select** button. The readout at the bottom of the screen changes to an analog radio tuner scale. Use the wheel to tune the radio as though you were using a tuning knob. You'll have to stop scrolling to see if a signal is available on a certain frequency, because the iPod does not continuously change the frequency to which it's tuned while you're changing the station.

5 Set a Favorite Station

When you find a station that you want to bookmark for easy access, press and hold **Select** for several seconds. A small black triangle—the marker that indicates a saved station—flashes and appears to the left of the frequency display. It also appears in the tuner scale at the bottom. Repeat this process for every station you want to save.

When you have one or more stations saved, you can use the **Back** and **Forward** buttons to skip directly between them.

To remove a saved station, tune or skip to it and then hold down **Select** until the black triangle marker disappears.

6 Switch Between Radio Regions

The FM radio spectrum in the United States and Europe ranges from 87.5 to 107.9 megahertz (MHz), and the spectrum in Japan is 76 to 90MHz. The iPod's tuner range depends on which region you have selected in the **Radio Region** section of the **Settings** menu.

Navigate to the **Settings** menu (under the Main Menu) and scroll down to the **Radio Region** setting. Press **Select** to switch between **US**, **Europe**, and **Japan** to set the region in which you're trying to tune in FM stations.

97 Record Voice Memos

✓ BEFORE YOU BEGIN

51 Find and Play Music on the iPod

→ SEE ALSO

100 Listen to Your iPod in the Car

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If you're a writer, teacher, student, researcher, or just someone who likes to get quick thoughts recorded for posterity, one gadget you might find indispensable in your daily life is a small and convenient voice recorder. With an iPod in your pocket and an inexpensive add-on accessory, you can have one.

The iPod doesn't have a built-in microphone for recording your voice or any other sound, but its software does have support for third-party microphone accessories that unlock these features. Just connect the add-on device to the top or bottom of the iPod and begin recording. "Voice memos" you record in this way are stored in mono WAV format and can be transferred back to your computer to review at your leisure.

► NOTE

The iPod mini, iPod nano, and iPod shuffle do not support recording voice memos.

1 Get the XtremeMac MicroMemo Recorder (or Similar Device)

Several third-party companies offer voice recorder products compatible with various iPod models. iPod 5G owners will want to get the MicroMemo

recorder, made by XtremeMac (<http://www.xtrememac.com>) and sold for \$79.95. Owners of iPod 3G and 4G models will want to get the Belkin Voice Recorder (\$49.99) or the Belkin Microphone Adapter (\$19.95), which requires that you use your own external microphone.

All these devices work similarly, taking advantage of software support in the iPod that operates the same way no matter what recording device is connected to the iPod. The illustrations for this task show the Belkin Voice Recorder with an iPod 4G.

Visit the online Apple Store (<http://store.apple.com>) or an Apple retail store to pick up one of these devices, or visit the manufacturers' Web sites for news and availability information.

2 Connect the Device to the iPod

The MicroMemo recorder connects to the Dock connector at the bottom of the iPod, and has an adjustable microphone on a flexible arm. Plug the iPod into the recorder like you would a Dock, and adjust the microphone to suit your comfort.

Recorders for older iPods, such as the Belkin Voice Recorder, connect to the top of the iPod through the headphone jack. Plug the microphone into the top of the iPod, making sure that the long round prong goes into the microphone jack and that the small tab goes into the rectangular hole next to it. (The speaker should face the front.)

3 Record a Voice Memo

When you connect the microphone, the iPod immediately goes into Voice Memo recording mode; the display shows the elapsed time in the recording, and there are two available options: **Record** or **Cancel**. **Cancel** leads back to the iPod's normal menu system; **Record** begins audio recording. Select the **Record** option and press the **Select** button.

Speak into the microphone, hold up the iPod to capture a lecture, or just set it down and let it record. Depending on which device you're using, the 16-bit audio stream is recorded at either 44 KHz (high-fidelity) or 8 KHz (low-fidelity), which consumes either 5MB or 1MB of space per minute, respectively. This means if you have 10GB of unused space on your iPod, you can record voice memos for almost 12 hours (with a MicroMemo) or 67 hours (with a Belkin Voice Recorder) continuously before you run out of space. (If the iPod becomes full, you won't be able to record any more voice memos.)

1 Get the XtremeMac MicroMemo Recorder (or Similar Device)

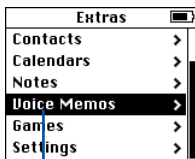


2 Connect the Device to the iPod

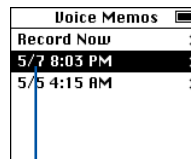


3 Record a Voice Memo

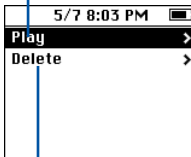
4 Save the Voice Memo



5 Play a Recorded Voice Memo



5 Play a Recorded Voice Memo

5 Play a Recorded Voice Memo**6 Delete Voice Memos****7 Transfer Voice Memos into iTunes****97 Record Voice Memos (continued)****4 Save the Voice Memo**

You can pause the recording and resume it (select **Pause**, then select **Resume**); at any time, you can select **Stop and Save** to close the recording and save it on the iPod's disk. Then press **Menu** to exit to the iPod's regular menu system. You can also press **Menu** to exit voice recording without saving the memo.

5 Play a Recorded Voice Memo

While the MicroMemo or Voice Recorder is connected to the iPod, an item called **Voice Memos** is available in the **Extras** screen (accessible from the Main Menu). Select this option to see all the voice memos you've recorded so far, labeled by the date and time of each recording. Highlight a voice memo and press **Select**, then choose **Play** to play it back through the microphone device's speaker; you can control it during playback as you would any song.

From the same **Voice Memos** menu, choose **Record Now** to record a new voice memo.

6 Delete Voice Memos

To delete a voice memo, select the voice memo you want to delete from the **Voice Memos** screen and then choose **Delete** to erase it from the iPod.

7 Transfer Voice Memos into iTunes

When you synchronize the iPod with iTunes, the voice memos are automatically downloaded into your iTunes Library and placed into a *playlist* called **Voice Memos**; the recorded memos are automatically deleted from the iPod after they have been synchronized with the **Voice Memos** playlist as regular songs in the music database. If you enable disk mode (see **88 Use Your iPod as an External Hard Disk**), you can access the voice memos in the **Recordings** folder at the top level of the iPod's disk.

► NOTE

The Belkin Voice Recorder might not synchronize your voice memos automatically into iTunes. If it doesn't, navigate to the iPod's **Recordings** folder, copy the contents to your computer, and add them into iTunes as described in **11 Add a Music or Video File to Your iTunes Library**.

98

98 Temporarily Store Digital Photos on Your iPod's Disk

✓ BEFORE YOU BEGIN

88 Use Your iPod as an External Hard Disk

→ SEE ALSO

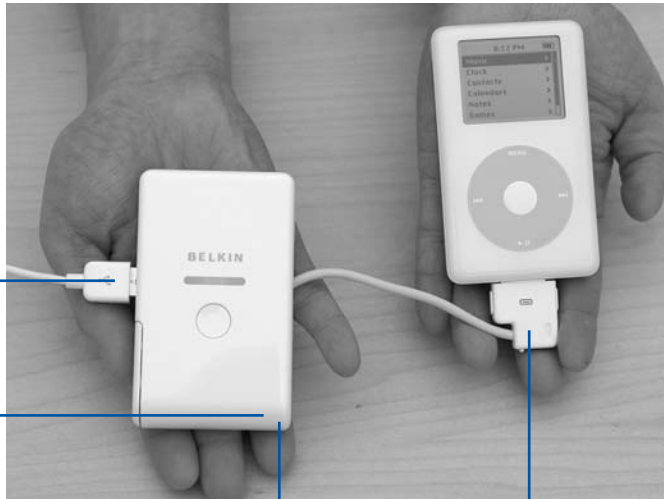
85 Download Photos from Your Camera Directly to Your iPod

If you aren't fortunate enough to have one of the newer iPod models with a color screen (the iPod 5G, iPod nano, or iPod photo), you can still use your regular iPod to enjoy some of the convenience that the color iPods afford you as a digital photographer on the go: You can empty your digital camera's photos onto a monochrome iPod's disk for safekeeping until you get home from your vacation.

Belkin makes—or, rather, made—two devices that served to transfer photos and other data to your iPod: the Digital Camera Link, which lets you connect your camera's USB cable directly to it; and the Media Reader, into which you can load any CompactFlash, Secure Digital (SD), Memory Stick, MultiMediaCard (MMC), or SmartMedia card to transfer its contents to the iPod. The company has discontinued these products, but you can still find them at deeply discounted prices from retailers such as Amazon.com. (The Digital Camera Link, for example, is marked down to \$24.99 from its original \$79.99.)

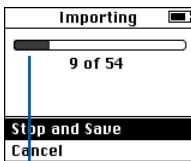
4 Connect the Camera or Media Card to the Device

1 Get the Belkin Digital Camera Link or Belkin Media Reader

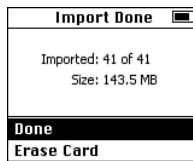


2 Load Batteries into the Device

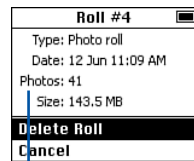
3 Connect the Device to the iPod



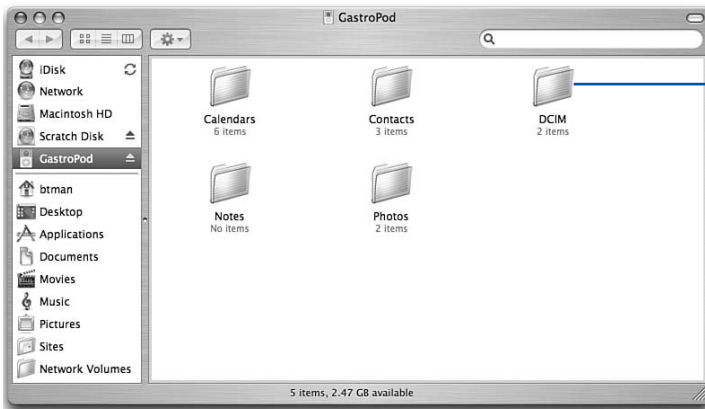
5 Transfer Photos to the iPod



6 Erase the Camera's Storage Card



7 Verify Transferred Photos



8 Import Photos from the iPod to Your Computer

If you do have an iPod with a color screen, refer to **85 Download Photos from Your Camera Directly to Your iPod** for a more elegant and cost-effective solution to this same need.

► NOTE

The iPod mini and iPod shuffle do not support importing photos.

1 Get the Belkin Digital Camera Link or Belkin Media Reader

The more inexpensive Belkin Digital Camera Link is best if you just want to transfer photos from your USB digital camera. Get the Belkin Media Reader if you want to transfer data other than just digital photos, or if you want to transfer digital photos from any of the six supported media types. The illustrations for this task show the Digital Camera Link.

Visit a retailer such as Amazon.com to obtain one of these devices at a large discount from its original list price.

2 Load Batteries into the Device

Both Belkin devices require AA batteries, which are included: four for the Media Reader or two for the Digital Camera Link. Insert them as indicated on your device's battery compartment.

3 Connect the Device to the iPod

Extract the connector and cord from the device and plug it into the iPod's Dock connector.

4 Connect the Camera or Media Card to the Device

Connect the camera's USB cable to the Digital Camera Link, or insert the camera's storage media card into the Media Reader's slot.

5 Transfer Photos to the iPod

Press the button on the Digital Camera Link to begin transferring photos to the iPod. If you have the Media Reader, the iPod's display changes to a **Photo Import** screen similar to the one shown in **85 Download Photos from Your Camera Directly to Your iPod**, except without color. Choose **Import** to copy the photos to the iPod.

While the photos are transferring, the iPod shows a progress bar indicating how many photos are in the "roll" and how many have been transferred so far. Monochrome iPods do not display the photos themselves, however.

There's a legend printed on the back of the Digital Camera Link that explains the different flashing signals of the LEDs and what they mean the unit is doing.

6 Erase the Camera's Storage Card

If you're using the Digital Camera Link, the photos are removed automatically from the camera's card at the end of the transfer. If you're using the Media Reader, select **Erase Card** from the screen that appears at the end of the download process.

7 Verify Transferred Photos

Navigate into the **Extras** menu from the Main Menu, where a new **Photo Import** item has appeared. Select this option. On the **Photo Import** screen is each "roll" of photos you transferred from your camera, followed by the number of photos in each roll, such as **Roll #1 (12)**, **Roll #2 (42)**, and so on. Select one of these rolls to view the date on which it was taken, the number of photos in it, and the amount of disk space it consumes. You can also discard a roll of photos from your iPod by selecting it and choosing **Delete Roll**.

8 Import Photos from the iPod to Your Computer

When you get back to your computer, you'll want to move the downloaded photos from the iPod into your favorite photo organizer application (iPhoto for Mac users, or Adobe Album or Adobe Photoshop Elements for Windows—although any software that imports photos from a digital camera will work). After you've loaded photos onto it from your camera, the iPod acts like a digital camera when connected to your computer; your photo software will think it's another camera and download the photos from it accordingly.

Connect the iPod to the computer using the Dock or cable. After the iPod syncs with iTunes, launch your photo organizer application and import the photos as you normally do from your camera. Be sure to erase the "camera's" (that is, the iPod's) contents when you're done transferring! Most photo software presents this option during the import process.

► NOTES

You might have to enable the iPod as an external hard disk before the photo software will recognize it as a camera-like device. See [98 Use Your iPod as an External Hard Disk](#) for more information, and remember to unmount the iPod from your computer when you're done transferring photos.

If your photo software does not recognize the iPod as a camera, you can manually copy the photos out of the **DCIM** folder on the iPod onto your computer's disk to import them.

99 Use Your iPod as an Alarm Clock**✓ BEFORE YOU BEGIN****5** Set the iPod's Date and Time**→ SEE ALSO****101** Turn Your iPod into a Boom Box with Remote Control

Taking your iPod with you on a vacation isn't just a matter of keeping yourself entertained in distant locales—it's also a practical matter. You can use the iPod to make sure that you wake up each morning to a more pleasant sound than your phone ringing with a wake-up call from the hotel's front desk. The iPod can act as an alarm clock, beeping at a prescribed time, or you can hook it up to a set of compact portable external speakers and have the iPod begin playing music from a specified playlist at the set alarm time. You might like this arrangement enough to use it at home as well. So long, clock radio!

▶ NOTE

Be sure to set the iPod's date and time before beginning this task. See **5** **Set the iPod's Date and Time** for details.

99**1 Create a Clock for Your Time Zone**

Navigate into the **Extras** menu from the Main Menu and then select **Clock**. The **Clock** menu shows graphical representations of clocks that keep track of the time in your iPod's preset time zone (which you set in **5** **Set the iPod's Date and Time**), as well as in any other time zones that you choose to define. Setting multiple clocks can help you keep time on your iPod as you travel, without having to reset the iPod's main clock every time you cross time zones.

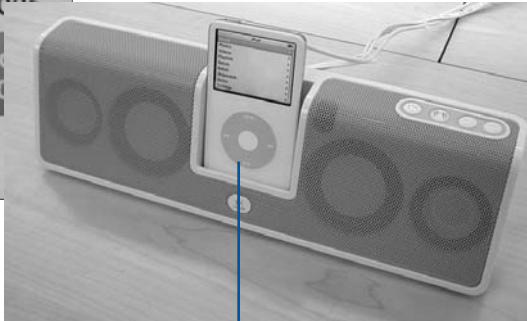
Suppose that you live in San Francisco, but you're on a business trip to New York, and you want to set your iPod to wake you up in your hotel room at 7:00. To create a new clock for New York time, select the **New Clock** item, and then use the subsequent menus to navigate to the **North America** region and the **New York** city entry. You are returned to the **Clock** menu, where the newly created **New York** clock—with its current correct time—is now listed.

▶ NOTE

The iPod's internal clock automatically keeps track of daylight saving time adjustments.



1 Create a Clock for Your Time Zone



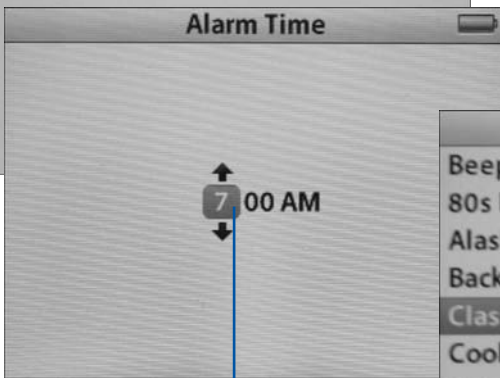
5 Connect the iPod to External Speakers

2 Set the Alarm Time



3 Turn On the Alarm

4 Choose a Beep or Playlist



4 Choose a Beep or Playlist

2 Set the Alarm Time



2 Set the Alarm Time

Select the **New York** clock. From the next screen, select **Alarm Clock** and then select the **Time** item. You're presented with a simple time readout (in one-minute increments) that you can adjust by rotating the track wheel. Set the time display to the time you want the alarm to go off (making sure that the display screen reads **AM** if you want to set it for the morning), and press **Select** to set the alarm time. You return to the **Alarm Clock** menu.

3 Turn On the Alarm

After you've set the alarm time, you must activate the alarm. Highlight the **Alarm** option and press **Select** to toggle the alarm clock function to **On**. The next time the iPod's internal clock reaches the set alarm time in New York's time zone, it emits a melodic beeping cadence for several seconds—enough to wake up most people sleeping a few feet from it.

4 Choose a Beep or Playlist

If you don't like the beep and want to take your alarm clock to the next level, first invest in a set of small, portable speakers built for the iPod, such as the Altec Lansing inMotion iM3 (\$179). From the **Alarm Clock** screen, choose **Sound**, select one of the listed *playlists*, and press **Select**. You can go back to the beep by selecting the **Beep** option from the top of the **Sound** menu.

► TIP

You can use any set of powered or unpowered speakers you like, as long as you can connect them to the iPod Dock through its audio output jack or directly to the iPod's headphone jack. Speakers built for the iPod, with a built-in Dock, are probably the most elegant solution with the fewest wires.

► NOTE

If you have **Shuffle** mode enabled, the iPod selects a song at random from the playlist you choose when the alarm goes off.

5 Connect the iPod to External Speakers

The speaker system acts as an iPod Dock. Insert the iPod into the slot in the tray so that the Dock connector fits over the tongue in the slot. When the iPod's alarm goes off, it plays its music through the Dock connector and into the speakers. You can then use the speakers' volume control to adjust the sound level, or smack the speakers' power button so that you can go back to sleep.

► NOTE

Shut off the alarm music by pressing **Play/Pause**.

100 Listen to Your iPod in the Car

✓ BEFORE YOU BEGIN

51 Find and Play Music on the iPod

→ SEE ALSO

99 Use Your iPod as an Alarm Clock

101 Turn Your iPod into a Boom Box with Remote Control

Perhaps more so than any other place, people want to listen to their iPod music in their cars. The car is an obvious place for an iPod, which gives you far more music capacity than an MP3 CD and far more personalized content than even satellite radio. Having an iPod in your car puts your time on the road back on your own terms, even when you're stuck in traffic.

Many automakers—such as BMW, Mercedes-Benz, Dodge, Audi, Scion, Volvo, and Mini—have committed to integrating iPod connectivity into their cars. Indeed, at the time of this writing, Apple boasts that 40% of new cars sold in the United States feature a factory solution for iPod connectivity (not “MP3 player connectivity,” but “iPod connectivity”). However, the solutions presented by these cars are usually a little less than ideal, and those of us without such privileged vehicles have to get by using one of the time-honored car-adapter technologies that are being made more and more iPod-friendly every day. This task looks at a few of the most popular configurations for hooking up your iPod to your car's audio system if the auto manufacturer doesn't already have an integration solution for you.

100

▶ WEB RESOURCE

<http://www.crutchfield.com/ipodcar>

Crutchfield's Digital Drive-Thru is a site that matches up your iPod model with your car and recommends the best possible combination of third-party add-on devices for integrating your iPod. All models of iPod and cars back to the 1964 Ford Mustang are supported.

1 Use a Tape Adapter and Car Charger

Perhaps the most inexpensive solution for iPod-enabled motoring is a tape adapter. This device, sold by several companies including Monster and Sony, costs \$20–\$25 and connects your iPod's headphone jack to your car's cassette tape deck.

Short of a direct stereo cable connection to your in-dash unit, this solution has the best audio quality available. However, there are plenty of drawbacks: There's an ungainly cord leading from your tape deck to the iPod. The iPod needs a separate charger, or at least some kind of protective case so that it doesn't get scratched as it sits in your car's center console. Most car tape decks

have a tendency to noisily auto-reverse between songs when they detect silence, interrupting the music. It's a hassle plugging in the dangling cable every time you get into the car. And many new cars don't even have tape decks anymore.

► **NOTE**

If possible, disable your car stereo's auto-reverse feature while your iPod is connected. Doing so prevents the tape deck from flipping the read head back and forth between songs.

► **TIP**

Set your iPod to about 75–80% volume and control the volume of the music using the dash unit's volume control. Setting the iPod to this volume level is usually enough to drown out the inevitable hiss of the tape's motors and dirt on the pickups, yet it's not high enough to cause clipping or distortion in the audio system. (Also, the volume level is low enough that you won't totally blow out your eardrums when you take your iPod out of the car and plug in your headphones without first adjusting the volume.)

You'll need a separate car power adapter to keep your iPod charged from the center console's cigarette lighter or power outlet while you listen to your music. Good choices include the XtremeMac Car Charger (\$19.95) or the Belkin Auto Kit (\$39.95), which includes an audio out jack for an FM transmitter.

2 Use an FM Transmitter and Car Charger

A somewhat more elegant solution than a tape adapter, yet one with some drawbacks of its own, is an FM transmitter. This device connects either to the headphone jack or the Dock connector of your iPod and broadcasts the audio output on a specified FM frequency that isn't used by a local radio station. Just tune your car stereo to that frequency to pick up the iPod's signal. An inexpensive and popular example is the Griffin iTrip (\$49.99), which comes in current models that fit both the iPod 5G and the iPod nano, as well as older models that fit the iPod 3G, 4G, and iPod mini by plugging into the top of the unit. Some complex FM transmitters even have integrated power adapters, such as the Sonnet PodFreq (\$99.95), Griffin RoadTrip (\$89.99), and iTrip Auto (\$69.99) for full-size iPods, or Griffin's TuneFlex (\$49.99) for the iPod nano.



1 Use a Tape Adapter and Car Charger



2 Use an FM Transmitter and Car Charger



2 Use an FM Transmitter and Car Charger

3 Use a Direct Wired Connection



Drawbacks of FM transmitters mostly have to do with signal strength and frequency response. As with any FM transmission, music you send from your iPod to your radio is subject to atmospheric interference, even if it's only inches away from the antenna or head unit. This can lead to static and broken sound, particularly in the higher registers. Furthermore, FM music by its nature has poor sound response in the upper frequency regions, meaning that your music will sound muted and dull, and instruments such as drums and vocals will be hard to hear properly.

▶ TIP

Some integrated FM adapters, such as the DLO TransPod (\$99) and the Griffin RoadTrip, feature rigid, adjustable stalks connecting the iPod in a cradle to the power outlet. This might suit your needs in getting unwanted cables out of the way, but also consider the value of having the iPod's cradle on a flexible cord so that you can pull it close to you to navigate or control your music. Remember, safety first—don't go for a solution that causes you to squirm around in your seat or peer away from the road for extended periods while you're barreling along at highway speeds!

3 Use a Direct Wired Connection

100

The most ideal solution, if you're lucky enough to have it, is a line-in jack in the in-dash unit. Just plug one end of a standard 1/8-inch stereo cable into the iPod's headphone jack, and plug the other end into the car unit's jack, and you'll be able to play your music without regard to frequency degradation or the idiosyncrasies of cassette tape adapters. However, you'll still have to deal with the dangling cords, both to carry the music to the car stereo and to power the iPod through the charger.

The solutions put forth by automakers such as BMW, Audi, and Mercedes-Benz tend to involve a Dock connector in the glove compartment, which conveys the *playlist* and song information to readouts on the dashboard or radio display and allows you to control playback using the buttons that are integrated with the steering wheel. Yet even these solutions aren't perfect—you get only very limited control over the iPod's navigation, the song information displayed in the dash readouts is sparse at best, and you don't get the full complement of navigation controls that would be available if you had the iPod out in the cockpit with you.

One popular commercial solution—the ultimate in both price and commitment to a permanently iPod-enabled car—is the Harman Kardon drive+play, which for \$199 consists of a “brain” unit that sits out of sight in the glove compartment or center console and to which you connect the iPod; a control knob that you can install in the console or next to the gearshift lever; and a backlit LCD screen that you position on the dashboard and which shows the

complete artist and track information that appears on the iPod's screen. You must connect all these components with wires, however. Harmon Kardon recommends that you have the device professionally installed—perhaps all the better if your stomach quails at the idea of punching holes through your dashboard panels to hook up the LCD screen and control knob. If you have the money and aren't afraid of making a permanent modification to your car, the drive+play can be an ideal and comprehensive solution.

► TIP

If you're the adventuresome type, you can wire a standard 1/8-inch audio cable directly into your car stereo's plug behind the head unit, which usually takes the place of a trunk-mounted CD changer in the input selection. This solution is only for experts, though. Check the enthusiast sites for your car make and model to see if anyone in the ubiquitous discussion forums has advice for you. Chances are that *someone* will have tried hooking up an iPod to your car model!

Perhaps until Apple brings out its own custom-designed iPod-docking in-dash stereo unit, there will never be a perfect solution for listening to your iPod music on the road. Yet until Apple delivers, we have plenty of choices of add-on devices that get the job done well enough for most of our needs.

101 Turn Your iPod into a Boom Box with Remote Control

✓ BEFORE YOU BEGIN

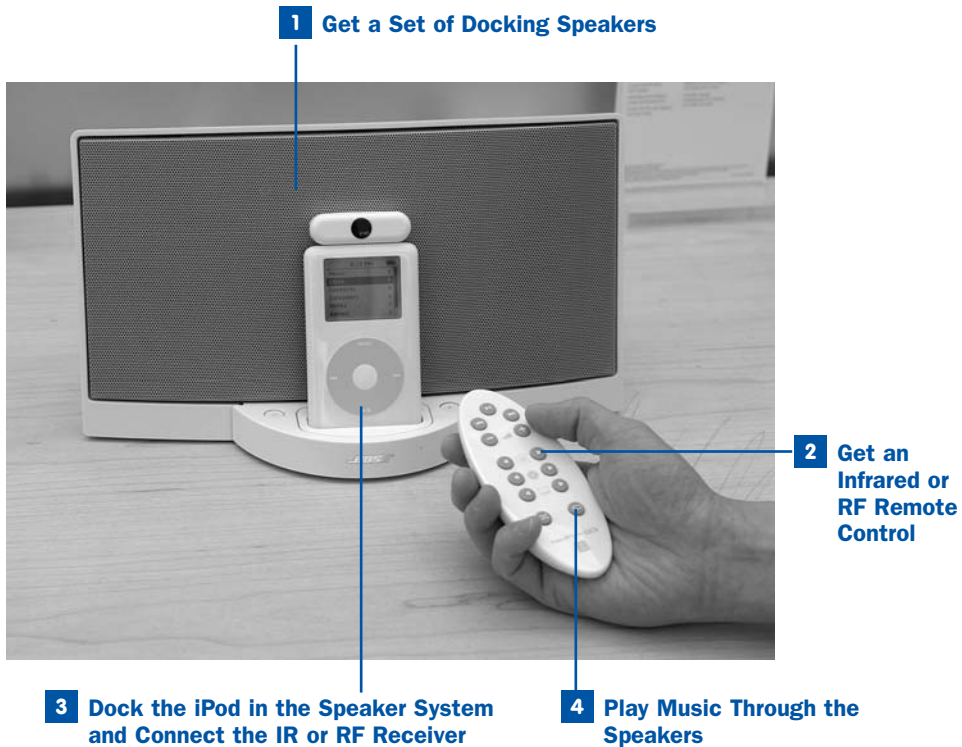
51 Find and Play Music on the iPod

→ SEE ALSO

99 Use Your iPod as an Alarm Clock

101 Listen to Your iPod in the Car

As you've seen, an iPod can serve as the musical engine behind photo slideshows on a TV, as an alarm clock with music, or as an endless supply of songs for your car. By this stage, it's hard not to see the iPod as a sort of "musical core" that you can plug into just about anything to give it new sonic life. Perhaps the ultimate expression of that is in how you can construct an excellent bookshelf stereo system or "boom box"—complete with infrared or RF remote control—out of off-the-shelf components designed around a Dock-like receptacle into which you simply plug the iPod. Free of the tedium of CDs or the random chance of radio, you get all the control of your iPod's *info tag* navigation and your iTunes *playlists*, coupled with high-quality sound from good speakers and the convenience of remote control. Most of these speaker systems even charge your iPod while it plays. What more could you want?

**101 Turn Your iPod into a Boom Box with Remote Control**

Apple recently introduced its own comprehensive, high-end solution for those seeking to make their iPods into home audio systems: the iPod Hi-Fi, which for \$349 includes top-quality audio amplification hardware and speakers as well as the infrared Apple Remote for controlling the music menus. If you have the money, the iPod Hi-Fi is one of the best choices you can make for fulfilling this task. But for those on a budget or those without the shelf space that the Hi-Fi requires, you can put together more modest systems that give you the same functionality for less money. This task describes how to make an iPod-based boom box from scratch using docking speakers and a remote of your choice.

1 Get a Set of Docking Speakers

Several companies make speaker systems designed to receive an iPod or iPod nano and reproduce its music with rich, deep sound. These include the portable JBL On Tour (\$99.95) or Altec Lansing inMotion iM3 (\$179), the round and stylish JBL On Stage (\$159) or its variant that comes with its own

RF remote (\$169), and the imposing Bose SoundDock (\$299). All these speaker systems are available and are on display at most Apple Stores, if you want to see and hear them in action and choose the best one for your needs.

2 Get an Infrared or RF Remote Control

Some companies' docking speaker systems—notably the JBL On Stage and the Bose SoundDock—come with their own integrated remotes. The Apple iPod Hi-Fi uses the Apple Remote that is also packaged with many new Mac models and is compatible with the iPod Universal Dock if you choose to simply connect speakers to the Dock's line-out port.

However, if your docking speakers don't have a built-in remote system, you'll need to get a separate infrared (IR) or radio-frequency (RF) remote control that consists of two parts: a receiver that plugs into the bottom or top of the iPod and conveys your controls to the iPod's navigation system, and a remote control that sends signals to the receiver.

Griffin's AirClick series (\$28–\$39, depending on the model) is an RF remote that communicates with a receiver that fits most iPod models. The iPod 5G takes an AirClick receiver that connects inline with the Dock connector and can be inserted into the docking speakers as the iPod normally would. Older iPods, including the iPod mini, have AirClick models that plug into the top of the unit, and other manufacturers' products connect in this way, too. (The illustrations for this task show an iPod 4G with the TEN naviPro eX receiver plugged into the top.) Unlike the IR signaling that the Apple Remote and other similar devices use, RF signaling does not require direct line-of-sight to the receiver, making your listening potentially more convenient.

3 Dock the iPod in the Speaker System and Connect the IR or RF Receiver

When you have your equipment together, connect the infrared or RF receiver to the iPod, either on the top or the bottom (depending on the model you have). Then plug the iPod into the speakers' Dock-like slot so that the Dock connector fits over the tongue in the slot.

4 Play Music Through the Speakers

Using the remote, navigate the iPod's menus and select music to play. You can still use the iPod's track wheel and buttons to perform operations that aren't available on the remote, but the remote gives you the convenience of skipping songs, pausing, or changing the volume while you relax across the room.

102 Enhance Your iPod's Battery Capacity**→ SEE ALSO**

- 84** Carry and View Your Mac or PC's Digital Photos and Slideshows on an iPod
- 88** Use Your iPod as an External Hard Disk

Apple guardedly promises 20 hours of battery life from your iPod and 14 from your iPod nano. As we all know, such rosy estimates are seldom entirely accurate, even for products as good as the iPod. Even if you do regularly get half a day out of a charge on your iPod, what good does that do you after a long red-eye flight from San Francisco to London, or in the middle of a weekend backpacking trip?

Fortunately, available devices let you bulk up your iPod's battery capacity—sacrificing its svelte size and elegant shape in favor of extra playback time when you need it most. Belkin makes a Battery Pack (\$49) that takes four AA batteries and provides an additional 12 to 15 hours of life for full-size iPods (not the iPod mini); and Apple's iPod shuffle Battery Pack (\$29) extends the life of your iPod shuffle by up to 20 hours with two AAA batteries. Similar devices are available for the iPod nano or iPod mini. Talk to your local Apple Store about their availability.

102**1 Get the Belkin Battery Pack or Apple iPod Shuffle Battery Pack**

Pick up the external battery module from your local Apple Store or other retailer. Be sure to get a device that's compatible with your model of iPod.

2 Load Batteries into the Device

Most iPod-compatible battery packs come with batteries in the package. Open the case as directed and insert the batteries.

3 Connect the iPod to the Battery Pack

Each battery pack connects to the iPod in a different way. The Belkin Battery Pack has two suction cups that attach to the shiny back of the iPod while the shell grips the iPod's sides and a Dock connector plug attaches to the bottom of the iPod. The iPod shuffle Battery Pack has a plug matching the USB connector so that you can slide the Battery Pack on the iPod shuffle just as you would the regular protective cap.

No further configuration is necessary. The iPod now draws power from both its internal power source and the external battery at the same time, wearing each down at a comparable rate. (One will not be exhausted before the other,

in most cases.) Be sure to have replacement batteries on hand to refill your external battery pack when the iPod finally runs out of juice, or keep a charger with you if you prefer using rechargeable AA or AAA batteries.



2 Load Batteries into the Device

1 Get the Belkin Battery Pack or Apple iPod Shuffle Battery Pack



2 Load Batteries into the Device

3 Connect the iPod to the Battery Pack



3 Connect the iPod to the Battery Pack

103 About Third-Party iPod Software**✓ BEFORE YOU BEGIN**

- 57** About the Care and Feeding of Your iPod

→ SEE ALSO

- 110** Update Your iPod's Software
- 111** Restore Your iPod to Factory Settings

As cool as the iPod is on its own merits, some owners just crave seeing how much more it can do than is officially intended. These people relentlessly seek out iPod “hacks,” which often involve third-party code loaded onto the hidden “system” segment of the iPod’s disk or its firmware to modify its operation to do anything from displaying custom status images to downloading your email for you to read on the iPod’s screen or burning music CDs straight from the iPod. Some enterprising hackers have even recently succeeded in porting the perennial favorite game DOOM to the iPod.

Apple doesn’t support or endorse these modifications; indeed, running them might void your iPod’s service warranty. Yet for the intrepid iPod owner, the prospect of downloading news feeds to read on the iPod or changing its battery meter to display a numeric voltage readout instead of a graphical bar is just too much to resist.

103**▶ NOTE**

Some companies, such as iPREPpress (<http://www.ipreppress.com>), provide content such as study guides that you can load onto the iPod using its standard feature set, such as the ability to view text notes. (See **94 Transfer and View Text Notes**.) These products can often be difficult to distinguish from hacks that require you to actually replace the iPod’s standard firmware with their own software. When looking for add-on materials for your iPod, be sure to look for an installation guide. Before you start installing things, read through the installation guide to see whether the add-on works with your iPod’s software or against it.

Almost since the very first days of iPod’s existence, sites such as iPodHacks.com and iPoding.com have showcased the very best (and all the rest) of the available modifications and third-party software designed to alter the iPod’s intended functionality. If you’re curious, keep an eye on these sites. They report not only on new developments in the iPod-hacking community, but also on news of upcoming iPod-related products and little-known tips and tricks that you can use in the unmodified, shipping version of iTunes.

► WEB RESOURCES

<http://www.ipodhacks.com>

<http://www.ipoding.com>

<http://www.ilounge.com>

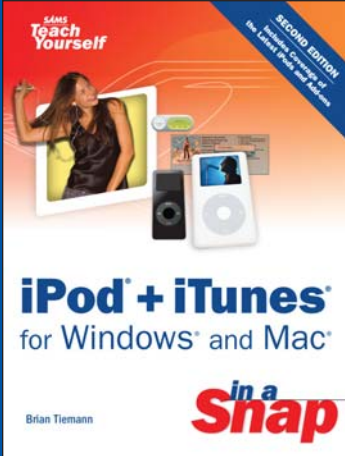
<http://www.ipodwizard.net>

iPodHacks and iPoding are two of the oldest and most extensive sites that archive hacks and modifications for your iPod. iLounge is an excellent news site that aims to keep you abreast of all the happenings in the world of iPod accessories, as well as many in-depth tutorials for some of the iPod's more esoteric functions. The iPodWizard site hosts a utility that allows you to customize your iPod's graphics, among other tricks.

Some kinds of iPod hacks involve simple, nonintrusive modifications, such as copying files to your iPod's hard disk to unlock special debugging features. These kinds of modifications are not destructive and can easily be reversed. However, you should be especially careful of any hack that works by modifying or replacing the iPod's system software or firmware. Such hacks have the potential to permanently disable your iPod and might void your warranty if anything goes wrong.

This book won't make recommendations for specific hacking tools. They're really best left as an exercise for readers who are keen on living dangerously. However, if you're determined to ride the ragged edge of the iPod lifestyle, you should always remember how to reset the iPod: Hold down the **Menu** and **Select** buttons simultaneously for several seconds. (Press the **Menu** and **Play/Pause** on 3G and earlier iPods.) You should also know how to restore the iPod's software to the factory conditions. (See **111 Restore Your iPod to Factory Settings**.) Any hacks that alter the iPod beyond the point where you can restore it to working order using these methods are just asking for trouble.

That said, though, the iPod user community at the sites mentioned earlier is extensive and helpful. Between them and the folks at the Genius Bar of your local Apple Store, chances are that you'll be able to find help no matter what predicament you land in.



iPod® + iTunes® for Windows® and Mac® in a Snap

Brian Tiemann

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BONUS CHAPTER **2**

Protecting Your Investment

IN THIS CHAPTER:

- 104** Back Up Your Music to CD or DVD
- 105** Back Up Your Music Using .Mac Backup (Mac Only)
- 106** Restore Your Music from Backup
- 107** Restore Your Music Library Database from a Backup Copy
- 108** Copy Your Music from the iPod Back to iTunes
- 109** Secure Your iPod Against Theft
- 110** Update Your iPod's Software
- 111** Restore Your iPod to Factory Settings
- 112** Turn a Scratched iPod into a Brushed-Metal iPod

The rapidly growing popularity of the iTunes Music Store brings with it not just new versatility in how we enjoy our music, but also a whole set of new problems that had never existed before. If what you bought is not a physical product that you can hold in your hands, but a data file on your computer's hard disk, what exactly is it that you "own"? How do you reassure yourself that you have actual possession of this valuable item? What does it mean for consumer ethics if you can make an exact duplicate of a song file that you bought, even if software prevents it from being playable on someone else's computer? And most importantly, what recourses are there if you lose your purchased music because of one of the inevitable glitches we've become used to in computing, such as a hard drive crash?

After a few months of using the iTunes Music Store, you might find that you've sunk hundreds of dollars into downloaded music and video files—and if you own an iPod, that's so many hundreds more. You need a way to be sure that this investment isn't put at risk of loss, any more so than a collection of physical CDs would be.

The iTunes Music Store support staff stresses the great importance of backing up your music and video files to a permanent medium such as CDs or DVDs. If you don't, you might be able to cajole the support staff into letting you download your music again; but you can't count on this because Apple's official position is that once you've successfully downloaded your music, you had better back it up. If you lose it, it's lost for good.

► NOTE

See [22 Check for Purchased Music or Videos](#) for information on how iTunes can recover an incompletely downloaded music file. This is also the method used when the iTunes Music Store support staff gives you access to redownload a track.

The tasks in this chapter describe techniques for backing up your music—and restoring it to working condition—so that you will never have to go to the support staff with your hat in your hand and a plate of cookies, pleading with them to bring your music back to life. With the right precautions, you'll always be able to restore your iTunes Library from scratch, even after a catastrophic hardware failure.

This chapter also discusses ways to keep your iPod in tip-top working condition, updating its software when new features or bug fixes are released by Apple, or restoring it to its factory configuration if that becomes necessary. You can even take an iPod whose shiny back has become depressingly scratched and breathe new life into it, ensuring that it will retain its good looks as long as it provides the soundtrack to your life.

104 Back Up Your Music to CD or DVD

✓ BEFORE YOU BEGIN

- 36 Create a Smart Playlist
- 58 Create an Audio CD from a Playlist
- 59 Customize CD Burning Options

→ SEE ALSO

- 106 Restore Your Music from Backup
- 107 Restore Your Music Library Database from a Backup Copy

One of the most straightforward ways to back up your music is by using iTunes and choosing to burn a series of data CDs or DVDs of a selected *playlist*. All you have to do is make a playlist of all the music in your Library and then make sure that you have enough blank CDs or DVDs to hold all the files in it.

▶ TIP

A recordable CD holds 650 or 700 megabytes (MB) of data; a recordable DVD holds 4.7 gigabytes (GB). Use the readout at the bottom of iTunes' **Library** view to see how big your music collection is and calculate how many blank discs you'll need to have handy.

You'll want to perform this backup task on a regular basis—at least once a month—and particularly after you go on a buying spree and add a lot of new tunes to your Library. Although backing up your music library might eat up a lot of blank discs—and cost you several dollars and a lot of time and clutter each time you do it—no doubt you'll agree that the value of restoring \$1,000 worth of purchased music from your careful backups is abundantly worth the initial hassle.

▶ NOTES

Backing up your song files (and other materials downloaded from the iTunes Music Store, such as digital booklets, TV shows, and music videos) preserves all the *info tags* embedded in the files but doesn't save external song data such as equalizer settings, start and end times, and the **Date Added**, **My Rating**, **Last Played**, and **Play Count** fields. It also doesn't save your playlists. To preserve this information, you must back up your **iTunes Music Library** file, as shown in Step 5 of this task. Refer to [107 Restore Your Music Library Database from a Backup Copy](#) for information on restoring your iTunes database file and the irreplaceable information in it.

Remember that purchased music and video files cannot be opened on a computer that has not been authorized using the account that was used to download the files. This means that you can't give your music to someone else by backing it up and then restoring it on his computer.

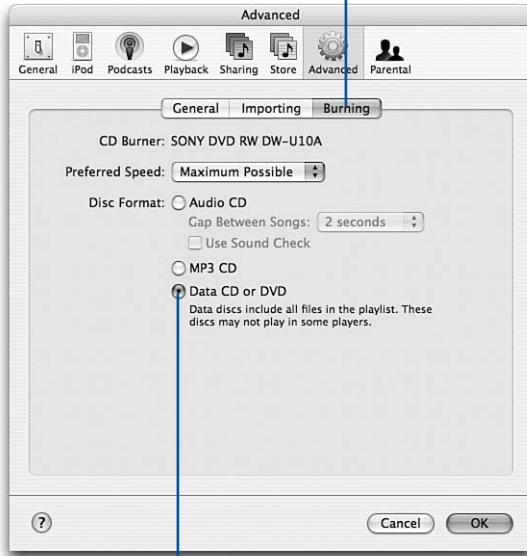
1 Open the Burning Preferences

Open the iTunes **Preferences** window. (Choose **iTunes, Preferences** on the Mac or **Edit, Preferences** in Windows.) Click the **Advanced** tab, and then click the **Burning** subtab to display the options for burning discs.

Verify that iTunes recognizes your CD or DVD burner, as explained in

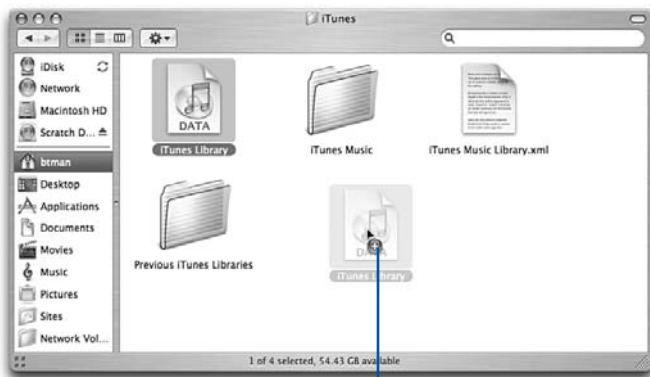
59 Customize CD Burning Options.

1 Open the Burning Preferences



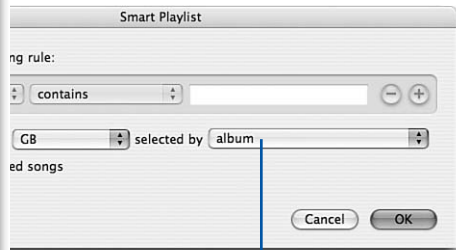
2 Choose to Burn a Data CD or DVD

4 Burn the Playlist to CDs or DVDs



5 Back Up Your iTunes Music Library File

3 Create a Smart Playlist Matching All Songs and Videos



2 Choose to Burn a Data CD or DVD

Enable the **Data CD or DVD** option button. This option creates discs that contain all the files in the playlists you burn, not just MP3 files (as occurs if you select the **MP3 CD** option). The **Data CD or DVD** option burns copies of protected AAC files, QuickTime movies, Apple Lossless files, and everything else that iTunes recognizes; it's intended primarily for backup purposes.

Click **OK** to close the **Preferences** window.

3 Create a Smart Playlist Matching All Songs and Videos

As described in [36 Create a Smart Playlist](#), create a *Smart Playlist* with criteria chosen such that the playlist contains all the files in your iTunes Library. One easy way to do this is to disable the **Match the following rule** check box, enable the **Limit to** check box, and set the limit to a size larger than the total size of your iTunes Library. Choose an appropriate **selected by** setting, such as **album** or **artist**. (This option helps you sort your burned CDs or DVDs in sequence.)

Click **OK** to create the playlist. Give it a suitable name such as **Everything**.

4 Burn the Playlist to CDs or DVDs

Select the playlist in the **Source** pane of the iTunes window and click the **Burn Disc** button in the upper-right corner of the window. In the same manner as described in [58 Create an Audio CD from a Playlist](#), iTunes automatically detects that the playlist is longer than can fit on a single disc. It asks whether you want to burn the entire playlist to multiple data discs or cancel the burn process and trim the playlist to fit on a single disc.

If you choose to burn the playlist to multiple discs, iTunes burns as many tracks as will fit onto the first disc, and then prompts you to insert another blank disc to continue. This process continues until all the tracks in the playlist have been burned onto discs. Be sure to label the discs appropriately so that you don't forget their sequence!

► NOTE

The discs that you burn are laid out with every file in a single flat folder at the top level of the disc, instead of being organized into hierarchical folders, as in the **iTunes Music** folder on your computer. This arrangement makes it possible for some music-disc players to read the files sequentially. However, it's unlikely that such players will read DVDs, and *none* will play protected AAC files.

► TIP

You might want to print a track listing of the playlist and mark which discs contain which set of songs. This list can be helpful when you want to restore selected songs from the backup set. See [61 Print a CD Jewel Case Insert with Album Art](#) for more information about printing track listings.

5 Back Up Your iTunes Music Library File

All your music is now backed up safely—but only your music files, with their internal info tags, are backed up. Your playlists and external database information such as the **Last Played** and **Play Count** fields and your star ratings are not preserved. If you experience a hardware failure and have to restore your music library, you won't get all your accumulated personalized data back if you stop now. To preserve this information, you must back up your **iTunes Music Library** file, found inside the **iTunes** folder inside **My Music** (in Windows) or in the **Music** folder (on the Mac).

► NOTE

Refer to [106 Restore Your Music from Backup](#) for information about restoring your music files and to [107 Restore Your Music Library Database from a Backup Copy](#) for restoring your personalized information from a preserved **iTunes Music Library** file.

104

Insert a writable CD into your computer's CD drive. When prompted, choose to open a writable CD window for copying files to be burned. The wording of this option varies according to your operating system. In Windows, choose **Open writable CD folder** using Windows Explorer. On the Mac, choose **Open Finder**. (You might have to double-click the disc's icon to open its window.)

In a second Windows Explorer or Finder window, navigate into the **iTunes** folder in your **My Music** or **Music** folder. Select the **iTunes Library.itl** and **iTunes Music Library.xml** files and drag them into the writable CD window. When the files are copied, burn the CD by choosing **File, Write these files to CD** (in Windows) or by clicking the **Burn** button below the window's title bar or in the sidebar (on the Mac). The database files are burned to the disc. Eject the disc, label it, and store it along with your backup discs of the music files.

► NOTES

The **iTunes Library.itl** and **iTunes Music Library.xml** files are in different formats, but they contain identical information and are updated simultaneously with every change you make within iTunes. Technically, you need only one of these two files to restore your iTunes Library fully, but the files are quite small, and there's no harm in preserving both. In Windows, you might have to turn off the **Hide file extensions for known file types** option (choose **Tools, Folder Options** and then click the **View** tab) to distinguish between the two files.

On the Mac, the **iTunes Library.itl** file appears as **iTunes Library**.

105 Back Up Your Music Using .Mac Backup (Mac Only)

✓ BEFORE YOU BEGIN

- 20 Purchase a Song, Album, Video, or Audiobook from the iTunes Music Store

→ SEE ALSO

- 23 Authorize a Computer to Play Purchased Music
- 104 Back Up Your Music to CD or DVD

Mac users are naturally a little better served than Windows users when it comes to using and protecting their iTunes music—Apple can't help but be a little bit partisan. Mac OS X integrates with iTunes in ways that Windows can't, and if you're a member of Apple's .Mac service (for a \$99 annual membership fee), you have access to a utility that makes backing up your iTunes Library a straightforward, painless, and even entirely hands-off affair. This utility is called **Backup**, and it's available to anyone who has Mac OS X 10.2 ("Jaguar") or higher and a paid .Mac account.

► NOTES

.Mac trial users can download and run Backup, but the only available backup location that you can select is **iDisk**. You must have a full paid .Mac account if you want to back up to CD, DVD, or to a mounted volume such as a hard disk.

Sign up for a .Mac account using the **Sign Up** button in the **.Mac** pane of the **System Preferences** application, or by visiting <http://www.mac.com>.

The Backup utility works by aggregating related files into collections called **QuickPicks**, each of which you can select or deselect for backup depending on your needs and the available storage space on your backup medium (CD or DVD, iDisk space, or a locally mounted or networked hard disk). Restoring backed up files from the backup medium is as simple as selecting them from the backup repository and clicking a button.

If you have a .Mac account, you should be using Backup already to protect the important files all over your Mac. But even if all you're interested in preserving is your iTunes music, Backup provides useful QuickPicks to serve your needs, and it's never too soon to start getting into the habit of using it regularly.

1 Download and Install Backup

If you don't already have the .Mac Backup utility installed, you must download it from the .Mac website at <http://www.mac.com>. Open this site in Safari or another browser. Log in using your .Mac member name and password. In the navigation bar along the left side of the page is an icon for **Backup**; click this link to go to the Backup page. Click the **Download**

Backup 3 button. On the subsequent download page, choose the appropriate version of Backup to download—**Backup 3.1** if you have Mac OS X 10.3.9 or later, or **Backup 2.0.2** if you don't.

Double-click the installer file when it's fully downloaded. Proceed through the installation procedure as directed.

2 Create a Backup Plan

Launch Backup from the **Applications** folder. Backup's main menu shows a list of all the backup plans you have configured, and whether they back up their data to CD or DVD, to a remote drive, to iDisk, or to another destination you specify. Click the + button in the bottom left to create a new backup plan.

In the window that appears, you can select from among several backup plan templates, designed for different common backup needs (such as preserving your **Home Folder** by copying its contents to another location on the disk on a daily basis, or preserving your **iLife** data by copying it to CDs or DVDs weekly). As luck would have it, there's a template that's perfectly suited to your needs: **Purchased Music and Video**. This template automatically includes all files you have purchased from the iTunes Music Store, as identified by iTunes and reported to Mac OS X. Select this template and click **Choose Plan**.

You'll have to wait for a few minutes as Backup examines your disk and builds up its catalog of available files to determine the size of each **iTunes Purchased Music** QuickPick, which is the collection of files included by default in the plan template.

In the **Destination and Schedule** pane, you can edit the default backup destination and timetable (backing up to CD or DVD every week, at the time of day when you created the plan) by double-clicking the plan, or you can add additional backup times and destinations to the plan by clicking the + icon. Adjust these settings to suit your needs. For example, you might want to change the CD/DVD backup time to midafternoon when you know you'll be working at the computer, or you might want to add a daily backup procedure to copy the files to a secondary hard drive.

► NOTE

iDisk is generally not a good location for backing up your music files—there's not enough storage space available, and it's slow to access. The **CD/DVD** option is a good solution if you have a suitable burner, but you'll end up making a sequence of discs each time you back up your music, which can get unwieldy and wasteful. Perhaps the best, neatest, and fastest solution is backing up to a hard drive. If you have an external FireWire or USB 2.0 disk or a remote drive mounted over the network, you can schedule an automatic backup to that location that doesn't even require you to be present when the Backup utility does its work.

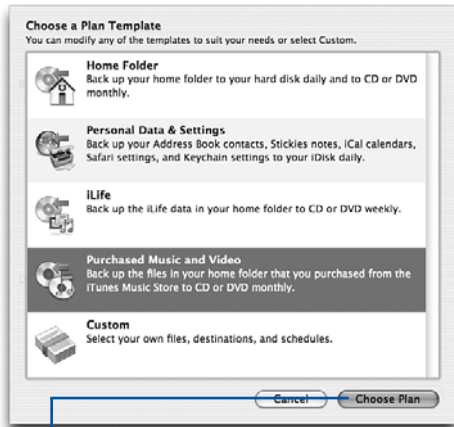


1 Download and Install Backup

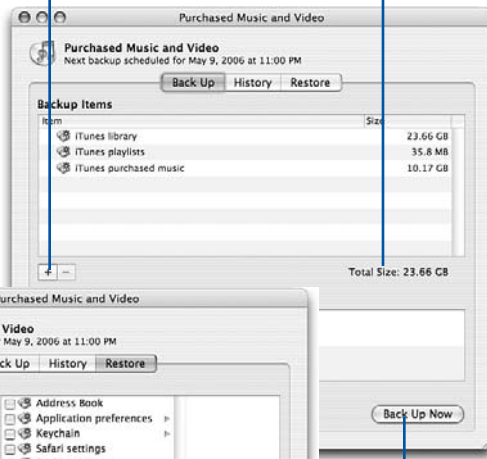


6 Choose the Backup Plan for Restoration

2 Create a Backup Plan

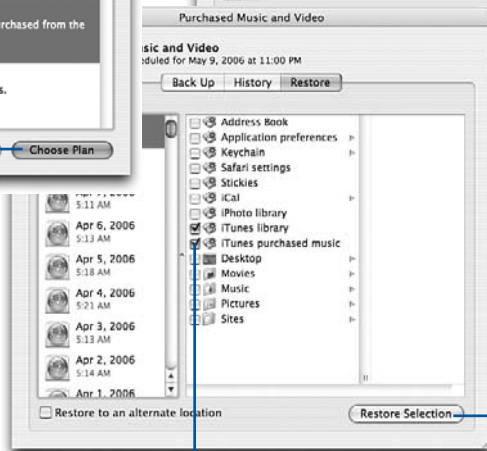


2 Create a Backup Plan



4 Prepare Backup Media

5 Back Up Your Data



7 Select Files to Restore

8 Restore Lost Files

3 Add iTunes QuickPicks

The **Purchased Music and Video** plan template by default backs up only the files you have purchased from the iTunes Music Store—not the files you might have imported from your CDs, and not any playlists you have created. The reasoning behind this approach is that your CDs are already a backup of your imported music; if your hard drive crashes, you can always just import the music again. But if you want to ensure that your entire iTunes Library is preserved—including all the time you’ve spent importing music and rating and organizing your files—you’ll have to add the QuickPicks that encompass the rest of your iTunes data as well. Make sure you have the available blank discs or hard disk space to handle all that extra data if you choose to use these additional QuickPicks.

Click the + button under the **Backup Items** pane. In the sheet that appears, click the **QuickPicks** tab, and then enable the check boxes next to **iTunes library** and **iTunes playlists**. Click **Done** to add these QuickPicks to your backup plan.

105

TIP

It’s technically unnecessary to select all three iTunes-related QuickPicks for backup; **iTunes purchased music** is a subset of **iTunes library**. However, selecting both these QuickPicks allows you to back up your entire music collection for safekeeping and then choose to restore only your purchased music after a data-loss incident, if you so desire.

4 Prepare Backup Media

A readout at the bottom of the **Backup Items** pane tells you how much data you need to back up. Keeping in mind the capacity of a CD or DVD is (as discussed earlier in this task), you can get an idea of how many discs to prepare.

If you’re backing up to a hard disk, make sure that the disk is mounted on your Mac and that you can navigate to it in the Finder.

5 Back Up Your Data

Click the **Back Up Now** button. The Backup utility scans the files in its QuickPicks and reports (in a dialog box labeled **Work To Do**) exactly how many CDs or DVDs are needed for the procedure. Click **Continue**. The Backup utility then begins copying files to the selected location. If you’re backing up to CD or DVD, Backup prompts you to insert a new disc each time one is filled with data. You must be present throughout the backup process to feed your computer new discs. If you’re backing up to a hard disk location, however, you can walk away while Backup does its work unattended.

6 Choose the Backup Plan for Restoration

Suppose that the worst should happen—your hard disk crashes and you have to install a new one. Or suppose that you upgraded to a new computer and lost your old data, or that you accidentally deleted one of your song files from the **iTunes Music** folder. It's time to restore the lost files from your backup.

Launch the Backup utility and then select the **Purchased Music and Video** backup plan from the main menu. Click the **Restore** button. If you backed up to a drive, the Backup utility accesses the archive files and displays each incremental one in a list. Select the most recent one to view the QuickPicks found within it. If you backed up to CD or DVD, Backup prompts you to insert the first disc in the backup set. It reads the catalog information and displays the QuickPicks in the listing window.

7 Select Files to Restore

Enable the check box next to the **iTunes library** or **iTunes purchased music** QuickPick (depending on which one you used to back up the files originally). Backup restores all the files at once that were part of this QuickPick when you performed the backup, so be sure you're looking at the most recent backup entry before restoring the data.

You can enable more than one check box at once. If a triangle appears next to the item's name in the list, you can navigate in Column view into that item's contents so that you can pick and choose individual items to restore.

8 Restore Lost Files

Click the **Restore Selection** button. The selected files are copied from the backup repository and placed back in their original locations on your hard disk. (You are prompted to insert the appropriate CD or DVD if you backed up to that medium.) You should now be able to launch iTunes and use your music as though nothing had ever happened!

106 Restore Your Music from Backup

✓ BEFORE YOU BEGIN

- 11** Add a Music or Video File to Your iTunes Library
- 104** Back Up Your Music to CD or DVD

→ SEE ALSO

- 68** Repair a Missing Song Entry
- 107** Restore Your Music Library Database from a Backup Copy

Murphy's Law (or one of its corollaries) implies that the surest way to prevent any disaster from befalling your computer or your music files is to keep regular

backups. However, if you don't keep backups, even a minor data-loss event can be painful enough to give you a newfound sense of responsibility.

Sooner or later will come a day when you need to rebuild your iTunes music collection—whether all at once (as after a hard disk crash) or a few songs at a time. If you've been keeping backups by burning CD or DVD sets as described in [104 Back Up Your Music to CD or DVD](#), restoring this music can be a breeze—easier and quicker than creating the backups themselves.

► **TIP**

When you restore music from backup files, each song brings with it the information in its internal *info tags*, such as **Song Name**, **Artist**, **Album**, and **Genre**. Remember that the info tags do *not* include external information such as the **Last Played** field and your star ratings, or your *playlists*. This information is contained in the iTunes database file, which you can restore from a backup as described in [107 Restore Your Music Library Database from a Backup Copy](#).

1 Configure iTunes to Copy Music to the iTunes Music Folder

2 Locate the Backed Up Music Files

3 Import Music into iTunes

106 Restore Your Music from Backup

Time	Artist	Album	Genre	My Rating
1	Bob Dylan	Bob Dylan	Rock	★★★★
2	Bob Dylan	Bob Dylan	Rock	★★★★
3	Zakir	Shaking the Tree ...	Rock	★★★★
4	John Mellencamp	Scarecrow	Rock	★★★★
5	The Bangles	Less Than Zero	Rock	★★★★
6	Billy Joel	Cold Spring Harbor	Rock	★★★★
7	Walter	Walter in the Woods ...	Rock	★★★★
8	Pink Floyd	The Wall	Rock	★★★★
9	Leonard Cohen	The Essential Leo...	Rock	★★★★
10	Electric Light Orch...	Out of the Blue	Rock	★★★★
11	The Alman Brothers	Brothers and Sisters	Rock	★★★★
12	Liz	The Joshua Tree	Rock	★★★★
13	Electric Light Orch...	Out of the Blue	Rock	★★★★
14	Billy Joel	Cold Spring Harbor	Rock	★★★★
15	Diann the Topper...	Diann the Topper...	Rock	★★★★
16	Liz	The Joshua Tree	Rock	★★★★
17	Electric Light Orch...	Time [Expanded]	Rock	★★★★
18	Peter Gabriel	Security	Rock	★★★★
19	Pink Floyd	The Wall	Rock	★★★★
20	The Alan Parsons ...	The Turn of A Fri...	Rock	★★★★
21	Boston	Boston	Rock	★★★★

1 Configure iTunes to Copy Music to the iTunes Music Folder

Open the iTunes **Preferences** window. (Choose **Edit, Preferences** in Windows, or **iTunes, Preferences** on the Mac.) Click the **Advanced** tab, and then click the **General** subtab. Enable the **Copy files to iTunes Music folder when adding to library** check box, if it isn't already selected. This option ensures that iTunes copies your song files off the CD or DVD and back into its **iTunes Music** folder, where the songs used to reside. Click **OK**.

2 Locate the Backed Up Music Files

Insert the disc containing the music files you want to restore. In Windows, select **Take no action** if prompted for what to do with the inserted disc. Music files are burned to data discs in the order specified in the all-encompassing **Smart Playlist** you created in [104 Back Up Your Music to CD or DVD](#). If you printed a track listing of the playlist at that time, you should be able to determine easily which disc has the songs you want.

The inserted disc appears in iTunes' **Source** pane and is automatically selected when the disc is mounted, showing you its contents. Navigate to the songs you want, using the **Browse** button to organize the songs by their info tags if necessary.

► NOTE

You can't change the info tags of song files on a data disc in iTunes. You must copy them to your hard disk before you can edit them.

3 Import Music into iTunes

Select the songs you want to restore: Hold down **Shift** as you click to select a contiguous block of songs, or hold down **Ctrl** or **⌘** to select multiple noncontiguous songs. Drag the songs from the CD's content listing to the **Library** item in the **Source** pane. The files are copied to the computer's hard disk and organized into their proper folders in the **iTunes Music** folder. If you go to the **Library** view and navigate the **Browse** lists, you'll find the songs right where they should be.

107 Restore Your Music Library Database from a Backup Copy

✓ BEFORE YOU BEGIN

- [104](#) Back Up Your Music to CD or DVD
- [106](#) Restore Your Music from Backup

→ SEE ALSO

- [68](#) Repair a Missing Song Entry
- [108](#) Copy Your Music from the iPod Back to iTunes

The Music Library database file, found in the **iTunes** folder within the **My Music** folder (in Windows) or the **Music** folder (on the Mac), is the heart and soul of iTunes. Sure, you can recover all your actual *music* by simply copying your backed up song files back into iTunes. But the Music Library database file (**iTunes Library.itl** on Windows, or **iTunes Library** on the Mac) is what stores all the extra information, such as your *playlists*, your star ratings, equalizer settings, and external fields such as the **Last Played** and **Date Added** fields. Without that information, all the personalization you've done to your iTunes music is lost, and you have to start building it back up from scratch.

This is why it's important to back up your iTunes Music Library database each time you back up your music files, as described in [104 Back Up Your Music to CD or DVD](#). It's a little extra work, but protecting the ways you've trained iTunes to play your favorite music might be every bit as important to you as protecting the music itself.

This task is useful in many circumstances, such as when you're installing iTunes on a new computer. However, it's of particular interest when you have restored music from a backup (as described in [106 Restore Your Music from Backup](#)) and then notice that your ratings and play counts have disappeared.

▶ NOTE

The procedure described here restores your Library to the state it was in when you last backed it up. Any changes or additions you have made since that time will be overwritten when you restore the Library file. This task describes how to restore any music files you have added in the interim, but your star ratings and play counts for those files will be blanked out.

1 Quit iTunes

Because iTunes writes changes to the Music Library database file when you exit the application, you must quit iTunes (choose **File, Exit** in Windows, or **iTunes, Quit** on the Mac) before beginning this task.

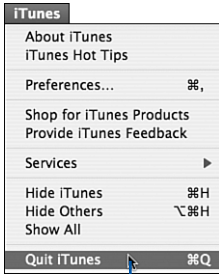
2 Locate the Backed Up Music Library Database File

Find the CD, DVD, or disk location where your backup copy of the **iTunes Library** file is. Open a Windows Explorer or Finder window that shows this file.

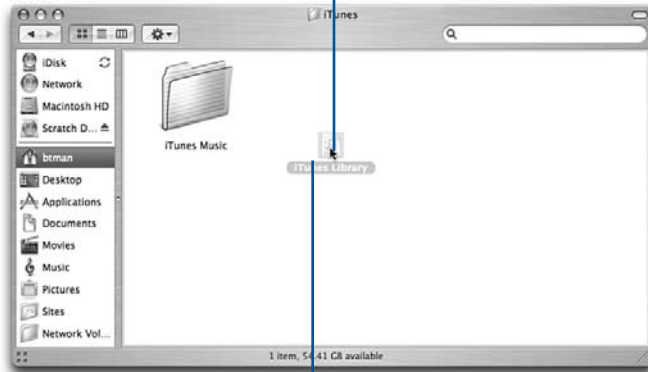
▶ NOTES

The **iTunes Library.itl** and **iTunes Music Library.xml** files are in different formats, but they contain identical information and are updated simultaneously with every change you make. You can theoretically restore your iTunes Library from either file, but the binary **.itl** file is preferred. In Windows, you might have to turn off the **Hide file extensions for known file types** option (choose **Tools, Folder Options** and then click the **View** tab) to distinguish between the two files.

In this task, the filename *iTunes Library* refers to the **.itl** file.



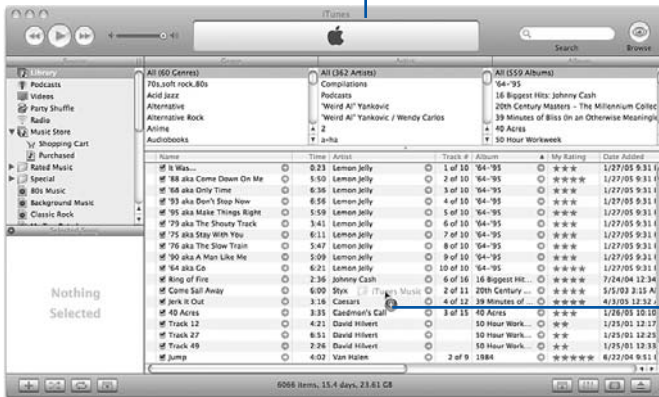
1 Quit iTunes



2 Locate the Backed Up Music Library Database File

3 Copy the Music Library Database File into the iTunes Folder

4 Relaunch iTunes



5 Reimport iTunes' Own Music Library Folder to Restore Lost Entries

107 Restore Your Music Library Database from a Backup Copy

3 Copy the Music Library Database File into the iTunes Folder

In a second Windows Explorer or Finder window, navigate into the iTunes folder inside the My Music folder (in Windows) or the Music folder (on the Mac). Select all the files whose names begin with iTunes Music Library and drag them out of the folder into a temporary location, such as your desktop.

From the Windows Explorer or Finder window that you opened in Step 2 (the window onto the backup media), drag a *copy* of the **iTunes Library** backup file into the **iTunes** folder window you just opened in this step. Be sure to drag a *duplicate*, not the original file. If the backup copy of the file is on a separate volume or a CD or DVD, a duplicate is created automatically. If the backup copy exists on the same disk, hold down **Option** on the Mac or **Ctrl** in Windows to duplicate the file as you're dragging it from one place to another.

4 Relaunch iTunes

Start iTunes. When you reopen the application, it reads the newly restored Music Library database file and shows the playlists and song information from there rather than from the file it had been using previously. If you restored a backed up database file over a nearly empty one from a newly reinstalled copy of iTunes, your Library should be populated with all the music you had before the database file was lost.

If all is well, you can throw away the old **iTunes Library** file that you dragged to the temporary folder or your desktop. If anything goes wrong, however (for example, if the restored file has been corrupted somehow), you can go back to the previous state of the iTunes Library by quitting iTunes and then moving the temporary file back into place in the **iTunes Music** folder.

107

► TIP

The **iTunes Music Library.xml** file has the additional benefit that iTunes can import it directly, thus restoring the external data included in it (such as your playlists, star ratings, and so on). If iTunes fails to read your Music Library database properly after this step, try importing the XML version of the database. To do this, choose **File, Import**, navigate to the location of the backed-up **iTunes Music Library.xml** file, and click **Choose** or **OK**.

5 Reimport iTunes' Own Music Library Folder to Restore Lost Entries

There's one final housekeeping trick to perform. If you backed up your **iTunes Library** file at an earlier time than your last backup of song files—or if you've been adding new music since reinstalling iTunes—you need to add those new songs to the restored Library (because it won't yet know they exist). Fortunately, this step is an easy one.

In a Windows Explorer or Finder window, navigate into your **iTunes** folder and locate your **iTunes Music** folder, which contains all your organized music (including songs you've added or purchased since backing up your database file). Remember that iTunes can tell whether you've already added a certain file to the **iTunes Music** folder, and it won't add a second copy if

you try to import the file again. Taking advantage of this knowledge, simply drag the **iTunes Music** folder from its window into the song listing area of iTunes. (Note the + sign on your mouse pointer indicating that the folder's contents will be added to iTunes.)

When you let go of the mouse button, iTunes imports only those songs within the **iTunes Music** folder hierarchy that *weren't* already in its database. This process might take a few minutes, depending on the size of your music collection, but when it's done, you'll have all your music back to its normal state. Any external data fields (such as the **My Rating**, **Play Count**, and **Equalizer** info tags) that you added to your newly acquired music will be reset, but those fields are still intact for all your other files, and you now have all your music at your fingertips again.

108 Copy Your Music from the iPod Back to iTunes

✓ BEFORE YOU BEGIN

- 46 Transfer Your Music and Videos to Your iPod

→ SEE ALSO

- 104 Back Up Your Music to CD or DVD
- 88 Use Your iPod as an External Hard Disk

So that Apple could convince the record labels that iTunes and the iPod were not merely tools designed to help people steal music, the company had to engineer them in such a way that they couldn't be used for nefarious purposes—or, at least, not *easily* used thus. Within the officially supported feature set of the iPod, you can copy music only from iTunes to the iPod, not the other way around. This arrangement prevents people from loading up an iPod with a diskful of tunes, sauntering to someone else's computer, and offloading fresh copies of all that music to someone who didn't pay for it. We all know that a resourceful thief can find ways around that missing feature, and such a thief won't be put off by the “Don't steal music” label that Apple rather optimistically puts on every new iPod. But by making it at least marginally inconvenient, Apple has ensured that the record labels will treat the iPod as part of a new and emerging legitimate market before they consider it a threat to their business.

However, theft isn't the only reason you might want to get music from your iPod onto your computer. The most obvious is as a backup; if your computer's hard disk crashes, and you've synchronized your music with the iPod, why worry? You have a perfect mirror of your entire music and video collection on the iPod, complete with star ratings and *playlists* and all the rest of the personalized information on which you've come to depend. So why can't you just copy the music back onto your computer?



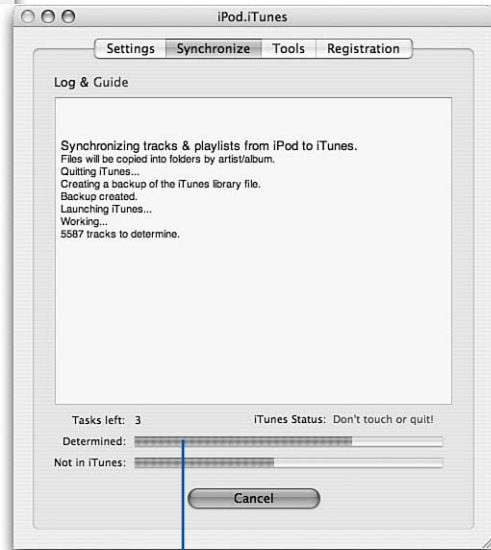
1 Mac: Download or Purchase iPod.iTunes



3 Mac: Enable the iPod as an External Hard Disk



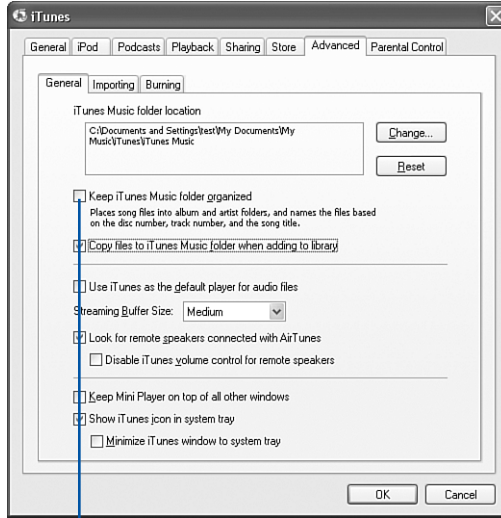
4 Mac: Synchronize the iPod's Music in iPod.iTunes



4 Mac: Synchronize the iPod's Music in iPod.iTunes



5 Windows: Download or Purchase CopyPod



6 Windows: Configure the iPod Not to Keep iTunes Music Folder Organized

7 Windows: Force Detection of Your iPod in CopyPod

9 Windows: Synchronize the iPod's Music in CopyPod



File	
New Playlist	Ctrl+N
New Playlist from Selection	
New Smart Playlist...	Ctrl+Alt+N
New Folder	Ctrl+Shift+N
Add File to Library...	Ctrl+O
Add Folder to Library...	Ctrl+W
Close Window	Ctrl+W
Import...	Ctrl+Shift+O
Export Song List...	
Export Library...	
Get Info	Ctrl+I
My Rating	
Edit Smart Playlist	
Show Song File	Ctrl+R
Show Current Song	Ctrl+L
Burn Playlist to Disc	
Create an iMix...	
Update iPod	
Page Setup...	
Print...	Ctrl+P
Exit	

10 Windows: Import the Copied Files into iTunes

8 Windows: Connect Your iPod

2 Mac: Connect Your iPod

Apple doesn't support this kind of data transfer, but don't worry—third-party developers have stepped up to the plate to provide it where Apple can't. Small, dedicated utilities at low prices exist for both Windows and the Mac that let you copy your iPod's music right back into iTunes: **iPod.iTunes** for the Mac (€29.95, about \$36), and **CopyPod** for Windows (\$19.90).

Steps 1–4 in this task cover the use of **iPod.iTunes** for Mac users, and Steps 5–10 describe the use of **CopyPod** for Windows users.

► **NOTES**

If you're starting over with a new computer or a fresh installation of iTunes, and you connect the iPod to your computer, iTunes might try to establish a new “link” with the iPod—which means that it will delete all the music from the iPod and replace it with whatever is in the new iTunes Library. Always select the **No** option when presented with a dialog box offering to change the link and replace the iPod's contents (at least until you've successfully restored your iTunes Library)!

Naturally, restoring your music from the iPod won't recover files that you couldn't copy to the iPod in the first place, such as MIDI files, QuickTime movies, or Internet Radio channels.

The procedures described in this task use methods not officially supported by Apple, and they might result in your iTunes Library being corrupted, your iPod's configuration being damaged, or both. Be sure to back up your music if possible, and refer to **111 Restore Your iPod to Factory Settings** if your iPod should need it.

1 Mac: Download or Purchase iPod.iTunes

Go to <http://www.crispsofties.com>, home of the iPod.iTunes software. Follow the **Download** or **Purchase** links. Note that if you are trying to restore all your music from the iPod, the free trial version is *not* suitable because it deliberately skips copying about half the tracks from your iPod to iTunes. To copy your complete iPod, purchase the full version of iPod.iTunes, either as part of the initial download or after downloading the trial version by installing an activation code.

2 Mac: Connect Your iPod

Connect your iPod to the computer using the Dock or cable. When iTunes launches, it might warn you that the iPod is “linked” to another computer and offer to change the link to this computer and replace the iPod's contents with its own. Click **No**.

3 Mac: Enable the iPod as an External Hard Disk

Open the iTunes **Preferences** window. (Choose **iTunes, Preferences**.) Click the **iPod** tab, and then click the **Music** tab within the window. Select the

Enable disk use check box. Dismiss the dialog box that warns you about unmounting the iPod, and click **OK**.

4 Mac: Synchronize the iPod's Music in iPod.iTunes

Launch **iPod.iTunes**. This application is designed to operate in conjunction with iTunes, which runs in the background. iPod.iTunes quits and relaunches iTunes several times and creates some temporary *playlists* that it uses while copying the music. It's important that you not work with iTunes or quit it while iPod.iTunes restores your music. Just let iPod.iTunes do its job.

The **Start** button appears if conditions are correct for transfer. Click **Start** to begin the process.

First iPod.iTunes reads the iPod's contents and the iTunes Library to determine how many tracks on the iPod don't exist in iTunes. Then it copies those tracks into iTunes, complete with star ratings and other external data (such as the **Last Played** and **Equalizer info tags**). Finally, it copies the iPod's playlists into iTunes, prefixed with the generic **From Mom's iPod** (which you can change in the **Settings** tab). This process can take a long time, up to or exceeding an hour depending on the size of your music collection.

► NOTE

Smart Playlists copied from the iPod back into iTunes become regular playlists because the iPod can't distinguish between the two in its own database.

Quit iPod.iTunes. Go back into the iTunes **Preferences** window and deselect the **Enable disk use** check box. You can now begin reorganizing your recovered music if necessary—fix up your playlists, browse the newly imported tracks, and so on. When you synchronize your iPod again in the normal way, you can allow iTunes to establish its link with the iPod and copy its music back to the iPod's disk.

5 Windows: Download or Purchase CopyPod

Go to <http://www.copypod.net>, home of the **CopyPod** software. Follow the **Download** or **Purchase** links. The trial version is time-limited to 14 days. If you need to restore your music on a one-time basis, the trial version might suffice for your needs. (It's good to support software developers who produce useful software by paying for a registered copy, though, so if CopyPod helps you, please consider registering it anyway!)

6 Windows: Configure the iPod Not to Keep iTunes Music Folder Organized

Open the iTunes **Preferences** window. (Choose **Edit, Preferences**.) Click the **Advanced** tab, and then click the **General** subtab. Disable the **Keep iTunes Music folder organized** check box to prevent iTunes from automatically naming folders and interfering with the restore process. Click **OK**.

7 Windows: Force Detection of Your iPod in CopyPod

Launch **CopyPod**. In the main window, click the **Force iPod Detection** button. This command prevents iTunes from launching and taking control of the iPod when you connect it.

► NOTE

The **Force iPod Detection** button kills a background process that iTunes uses to detect when you connect the iPod. If you restart your computer, iTunes' iPod-detecting function is restored.

8 Windows: Connect Your iPod

Connect your iPod to the computer using the Dock or cable. CopyPod detects the iPod and asks if you want to list the songs on its disk. Click **Yes**.

► TIP

If CopyPod doesn't automatically detect your iPod, try selecting your iPod from the **Select iPod** drop-down menu in the upper-left corner of the **CopyPod** window.

9 Windows: Synchronize the iPod's Music in CopyPod

Select all the songs on the iPod by pressing **Ctrl+A**, or select only certain songs by navigating through the **Artists**, **Albums**, and **PlayLists** boxes and sorting the songs using the column headers as you would in iTunes. When you've selected all the songs you want to transfer from the iPod into iTunes, click the **iTunes** button under the **Backup To** label.

10 Windows: Import the Copied Files into iTunes

CopyPod creates two files on your desktop, called **iPodBackupLibrary_1.xml** (which contains your song file information) and **iPodBackupLibrary_2.xml** (which contains your playlists).

Launch iTunes, and choose **File, Import**. This command lets you select a catalog file in XML format and import the song files and other information it describes. Choose **XML files (*.xml)** from the **Files of type** drop-down list,

and then select the **iPodBackupLibrary_1.xml** file on the desktop. Click **Open**. iTunes imports all the recovered files back into its Library, reorganizing them into the proper folders.

Using the same method, import the **iPodBackupLibrary_2.xml** file. This file restores all your playlists.

► NOTE

Smart Playlists copied from the iPod back into iTunes become regular playlists because the iPod can't distinguish between the two in its own database.

You can now go back to the **Advanced** pane of the iTunes **Preferences** window and enable the **Keep iTunes Music folder organized** option (if you had it enabled before restoring your music with this procedure). You're now back in business. You should restart your computer to restore iTunes' iPod-detection capability, and then you can sync your music back to the iPod in the normal way, this time allowing iTunes to establish its link with the iPod.

109 Secure Your iPod Against Theft

✓ BEFORE YOU BEGIN

- 4 Connect Your iPod for the First Time

→ SEE ALSO

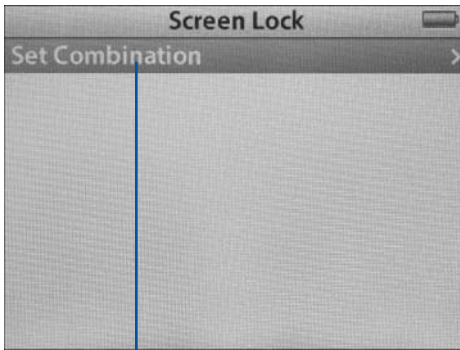
- 6 Configure Your iPod for Your Headphones or Speakers

109

The iPod 5G and iPod nano contain a screen lockout feature that helps defend against theft. When this feature is engaged, instead of the iPod's normal screen, a would-be thief will see only a brushed-metal face with a combination lock showing four digits. You must enter the correct four-digit combination before the iPod will unlock and show the Main Menu.

Even though it's perhaps a bit optimistic to think that a thief would decide to fiddle with an iPod's controls and ensure it isn't locked before picking it up and running, the screen lockout feature does have a significant benefit: A thief who doesn't have the combination can't retrieve sensitive personal information you might have stored on the iPod, such as your contacts or information stored in text notes. The thief can restore the iPod to factory conditions (see [111 Restore Your iPod to Factory Settings](#)) and thus unlock it, but this process also erases all the sensitive information from the iPod's disk.

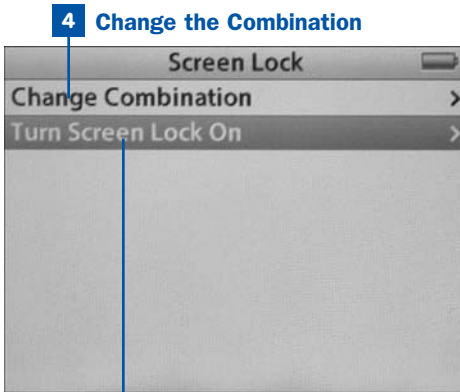
If you forget the combination, don't worry. As long as you're the rightful owner of the iPod, you can always unlock it by synchronizing it with your iTunes computer.



1 Set the Screen Lock Combination

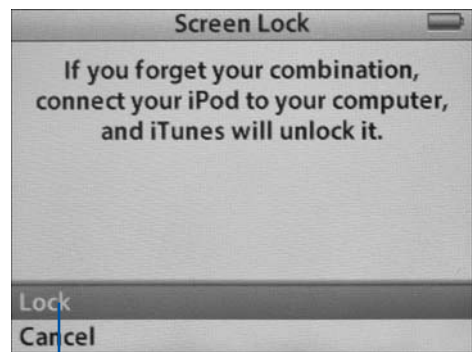


1 Set the Screen Lock Combination

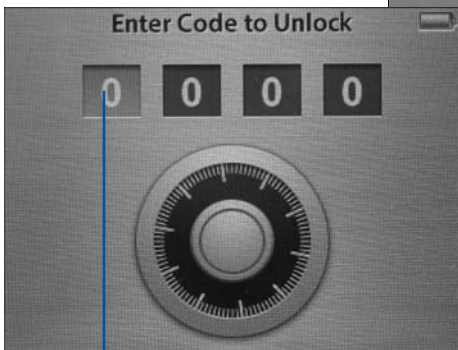


4 Change the Combination

2 Lock the Screen



2 Lock the Screen



3 Unlock the Screen



5 Synchronize with iTunes to Unlock the Screen

1 Set the Screen Lock Combination

Navigate from the iPod's Main Menu into the **Extras** menu. Then scroll to the bottom of the menu and choose **Screen Lock**. If this is the first time you've used the locking feature, the only option in the menu is **Set Combination**. Select this option and proceed to the locking screen.

For each of the displayed four digits, use the track wheel to pick a number from 0 to 9, and then press **Select** to move to the next digit. When you have specified all four digits in the combination, pressing **Select** takes you back to the **Screen Lock** menu. Be sure to remember the combination you choose!

2 Lock the Screen

From the **Screen Lock** menu, select the **Turn Screen Lock On** option. The iPod presents a confirmation screen that informs you that you can unlock the iPod by synchronizing it with iTunes. Highlight **Lock** and press **Select**.

▶ NOTE

If music is playing at the time you lock the iPod, you won't be able to stop playing it or change the volume—all the iPod's controls are overridden by the screen lock. You have to unlock the iPod or sync it with iTunes before it will stop playing. Be aware that this means your battery might run down.

The iPod's display is replaced with the locking screen, and unless you enter the correct combination, that's the only thing it will display until you sync it with iTunes.

3 Unlock the Screen

Using the same method you used for setting the combination, use the track wheel to specify each digit in turn. The **Back** and **Forward** buttons move between digits, but after you've correctly entered all four digits and you press **Select**, the iPod unlocks and returns you to the Main Menu.

If you enter an incorrect combination, the four digits flash and remain unchanged.

4 Change the Combination

You can specify a different combination at any time, as long as you know the old combination. Choose the **Change Combination** option from the **Screen Lock** menu. You are taken to the same locking screen where you are prompted to enter the correct existing combination. Then you are asked to set a new combination as in Step 1.

5 Synchronize with iTunes to Unlock the Screen

Synchronizing your iPod with iTunes unlocks the screen. However, it does not clear the configured combination. If you forget the combination to your iPod, you won't be able to change it to a new combination without correctly entering the old one. This means that the only way to regain access to the screen-locking feature is to restore your iPod to factory settings. (See [111 Restore Your iPod to Factory Settings](#).)

110 Update Your iPod's Software

✓ BEFORE YOU BEGIN

- 4 Connect Your iPod for the First Time

→ SEE ALSO

- 111 Restore Your iPod to Factory Settings

Every few weeks, Apple issues an update to the software that powers the iPod, adding features and fixing bugs. Each such software release is delivered in the form of an “updater” that runs on either a Mac or a Windows PC, contains updates for all models of iPod in a single package, and gives you the option to either upgrade the software on your iPod or erase its disk and return it to the pristine factory condition.

It's important to keep abreast of iPod software updates for many reasons, not the least of which is that some of the tasks in this book are not possible without the latest software installed on your iPod. Be sure to check regularly at the iPod software download page to see whether an update has been released.

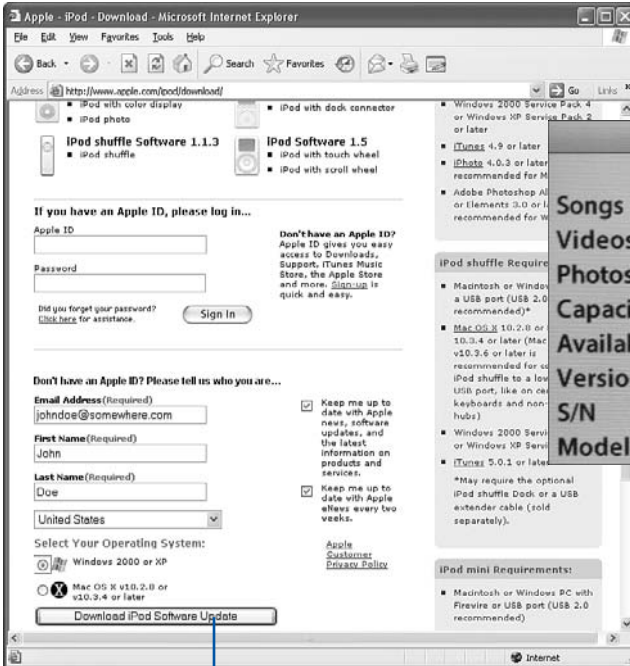
► NOTE

If you're on a Mac, iPod software updaters are delivered through the **Software Update** mechanism (in the **Apple** menu) that also brings you updates to Mac OS X and your installed Apple software. Be sure to run **Software Update** regularly. It's how your Mac is protected against security vulnerabilities, and it's also a convenient way to have necessary upgrades at your fingertips.

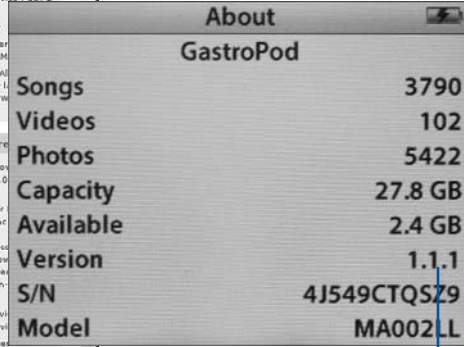
► WEB RESOURCE

<http://www.apple.com/ipod/download/>

Here is the iPod software download page, where you can get the latest iPod updaters for Mac or Windows computers.



1 Download the Latest Updater



2 Check Your iPod's Software Version

3 Run the Updater Program



5 Update the iPod's Software

6 Disconnect the iPod to Complete Installation



4 Connect Your iPod

1 Download the Latest Updater

Visit the iPod software download page. Apple requires you to identify yourself before you can download the updater, although this is not an authentication process and doesn't require you to be registered with any particular service. Enter your name and email address in the fields at the bottom of the page, and indicate whether you want to receive promotional email using the two check boxes. Specify your computer's operating system using the radio buttons. (Your correct platform should be automatically selected.) Click **Download iPod Software Update** to begin the download.

► NOTE

If you have an Apple ID, such as the login address you use to download music from the iTunes Music Store, you can use it to log in instead of supplying your name and email address.

When the download is complete, there is an installer program for you to run: **iPod.mpkg** on the Mac or **iPodSetup.exe** on Windows. Run this installer. When it's complete, the updater is available in the **Programs** menu in Windows, or in a folder called **iPod Software Updater** inside **Utilities** within the **Applications** folder on the Mac.

2 Check Your iPod's Software Version

On the iPod, navigate into the **Settings** screen, and then select **About**. Check the **Version** number reported in the information screen.

3 Run the Updater Program

Launch the **iPod Updater** *date* program, either from its location on the disk or from the **Programs** menu in Windows, making sure that you pick the one with the latest date (if you have downloaded other updaters in the past). The first screen that appears reports the version numbers for each of the iPod models it supports. Compare this version number with the version you saw on your iPod in Step 2. If your iPod is up-to-date and you plug it in, the updater tells you that no update is necessary. (By comparing the version numbers, you can save yourself the trouble of continuing with this task.)

► NOTES

Don't connect your iPod to the computer before you launch the updater program; doing so can cause the updater program to hang. Wait until the updater is running before connecting the iPod.

If you quit the updater without updating your iPod, you might have to manually unmount the iPod from the computer (by clicking Windows' **Unplug or Eject Hardware** icon in the system tray, or by clicking the **Eject** button next to the iPod in the **Finder** on the Mac) before you can disconnect the iPod safely.

4 Connect Your iPod

Connect your iPod to the computer using the Dock or cable. The updater heads off iTunes and prevents it from synchronizing your music while it's running. Your iPod's information, including whether its software needs updating, is displayed in the updater window.

5 Update the iPod's Software

If your iPod's software needs an update, the **Update** button in the **iPod Updater** screen is active. Click this button. (If you are running Mac OS X, you must enter an administrator's password.) The software is copied to the iPod.

6 Disconnect the iPod to Complete Installation

When you are directed to do so by the updater (and not before), disconnect the iPod from its Dock or cable. (You might also be directed to connect the iPod to an external power source.) The iPod resets, and the firmware update automatically takes place, as you can see by the progress bar that appears on the iPod's screen. After 15 seconds or so, the iPod resets again and returns to the Main Menu.

▶ NOTE

In some cases, particularly with newer iPod models, you don't have to disconnect the iPod from the computer, even though the updater says you should. The iPod simply updates its firmware and returns to the Main Menu. On iPods that *do* need to be disconnected, a message on the iPod's screen will direct you to do so.

Quit the updater program and keep it around for future use, as in

111 [Restore Your iPod to Factory Settings](#).

111 Restore Your iPod to Factory Settings

✓ BEFORE YOU BEGIN

110 [Update Your iPod's Software](#)

Perhaps your curiosity led you to install a “hack” that has resulted in an iPod that no longer boots or plays music correctly. Perhaps you’ve inherited a Mac-formatted iPod that you can’t use with your Windows PC. Perhaps you locked your iPod’s screen and can no longer remember the combination. Perhaps the iPod has mysteriously, on its own, seemingly gone crazy—unintelligible menu items, unresponsive controls, or the dreaded “folder with exclamation point” icon, which indicates that the system software on the iPod is no longer viable.

If resetting your iPod doesn’t bring it back to its senses (hold down both the **Menu** and **Select** buttons for several seconds to reset it; to reset iPods older than the 4G model, hold down both the **Menu** and **Play/Pause** buttons), you might have to bring out the big gun: a Software Restore.

Restoring the iPod (using the same “updater” mechanism that was used in upgrading the iPod’s software as described in [110 Update Your iPod’s Software](#)) entails erasing all the contents of the iPod’s disk, installing a new copy of the system software and firmware, and resetting its configuration to the state it was in when it first came out of the box. Before you embark on this process, however, make sure that you don’t have any important files stored on the iPod in disk mode; anything there will be gone after the iPod has been restored. But at least the iPod will probably work again. See [68 Use Your iPod as an External Hard Disk](#) for more information about disk mode.

► NOTE

Restoring the iPod formats the disk using the native format of the operating system on which you run the updater program—HFS+ for Mac or FAT32 for Windows. In this way, you can convert a Mac-formatted iPod into a Windows-compatible one, or vice versa.

1 Run the Latest iPod Software Updater

As described in [110 Update Your iPod’s Software](#), download the latest copy of the **iPod Updater** from Apple’s iPod software download site (<http://www.apple.com/ipod/download/>). If you’re using a Mac, run the **Software Update** utility to make sure that you have all the necessary updates.

2 Connect Your iPod

Install the updater and run it. When the window reads **Plug in an iPod to update it**, connect your iPod to the computer using the Dock or cable. The updater window shows the vital information of your iPod, including its name and the current version of the software on it.

1 Run the Latest iPod Software Updater

2 Connect Your iPod

3 Restore the iPod to Factory Settings

4 Set the iPod's Language

5 Sync Your Music to the iPod

111 Restore Your iPod to Factory Settings

3 Restore the iPod to Factory Settings

Click the **Restore** button in the **iPod Updater** window. (If you are using Mac OS X, you must enter an administrator's password.) The software is copied to the iPod and its disk is erased. When you are directed to do so by the updater (and not before), disconnect the iPod from its Dock or cable. The iPod resets, and the firmware update automatically takes place, as you can see by the progress bar that appears on the iPod's screen. After 15 seconds or so, the iPod resets again.

▶ NOTE

In some cases, particularly with newer iPod models, you don't have to disconnect the iPod from the computer, even though the updater says you should. The iPod simply updates its firmware and then returns to the Main Menu. On iPods that *do* need to be disconnected, a message on the iPod's screen will direct you to do so.

4 Set the iPod's Language

When the iPod returns to life, the first screen it shows is the **Language** selection menu, just as it did when you first set it up. (See **3 Select Your iPod's Language**.) Choose the language for your iPod.

Quit the updater software and unmount the iPod manually from your computer if necessary, by clicking the **Unplug or Eject Hardware** icon in Windows' system tray, or by clicking the **Eject** button next to the iPod in the Finder on the Mac. Disconnect the iPod from the Dock or cable.

5 Sync Your Music to the iPod

Connect the iPod to the computer once more. It's now effectively a brand-new unit, and iTunes treats it as such, giving you the opportunity to assign it a new name and register it, as described in **4 Connect Your iPod for the First Time**. When you choose to update your music automatically, the iPod's disk becomes filled with the music and videos in your iTunes Library once again, and—as a bonus—iTunes takes you to the iTunes Music Store where you can download free music as a welcome for “new” iPod users.

112 Turn a Scratched iPod into a Brushed-Metal iPod**→ SEE ALSO****111 Restore Your iPod to Factory Settings**

Not every problem you might have with your iPod has to do with the vagaries of software. It's just as much a concern for most iPod users to make sure that their hip little music player keeps looking like new. Although Apple's sense of style can hardly be faulted for looks, it does perhaps leave something to be desired in the day-to-day practicality of maintaining those looks. Naturally, this means keeping that shiny stainless-steel back plate mirror-smooth and free of scratches.

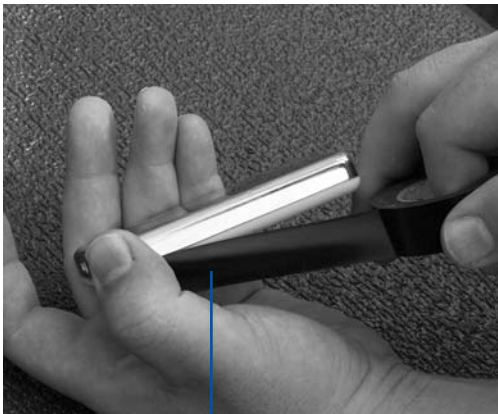
The sad fact is that it's all but impossible to keep the back of your iPod looking pristine forever. But the good news is that, with a common kitchen scouring

sponge or a piece of steel wool, a little bit of elbow grease and patience, and the fortitude to perform a little bit of seemingly destructive surgery on your beloved iPod, you can make it look just as good as when it was new, if in a slightly different way. All you have to do is give it a brushed-metal finish, and suddenly your iPod will not only be free of scratches, it'll be more resistant to new ones and to sweaty fingerprints as well. Performing this cosmetic surgery doesn't even void your warranty!

► **WEB RESOURCE**

<http://members.optusnet.com.au/brushedipod/>

Adam Podnar was one of the first to popularize the “brushed-metal iPod” solution, and since then many iPod owners have embraced it as a compelling alternative look for their iPods.



1 Mask the iPod's Front with Tape



2 Place the iPod Against a Guide Rail

3 Brush the iPod with an Abrasive Material

► **TIPS**

To experiment with different abrasive materials and brushing techniques before tackling your iPod, test the materials on the bottom of a shiny cookie sheet.

Many iPod nano owners have found that the plastic over the screen is easily scratched, and that a product such as Brasso or Meguiar's Mirror Glaze works well as a means of restoring it to its original clear luster.

1 Mask the iPod's Front with Tape

Using electrical tape, mask the plastic front face of the iPod, aligning the edge of the tape carefully with the boundary between the plastic face and the metal back.

2 Place the iPod Against a Guide Rail

Place the iPod face down against a piece of wood or other firm surface.

3 Brush the iPod with an Abrasive Material

Using the rigid guide to keep your hand moving steadily in parallel strokes, brush briskly up and down the back face of the iPod with the rough side of a kitchen sponge, a piece of steel wool, some fine-grained sandpaper, or a foam sanding block. Experiment with pressure and technique until you see brushed lines appearing the way you want them to look. If you accidentally scrape sideways across the iPod's face, just brush in properly aligned motions over the mistake, and it'll soon be covered up.

► **NOTE**

The iPod logo and other text are engraved in the metal and are not harmed by this process.

The longer you brush, the better your iPod's surface will eventually look. Keep at it, sanding the short sides with more care until they match the back.

Before long, you'll have an iPod that not only looks as good as new, but that has a look all its own that none of your iPod-carrying friends will have!

► **NOTE**

Be sure to wash your hands after you're done brushing the iPod's surface. You'll have created a thin film of microscopic metal shavings on your skin, which is never a good thing to ingest.